











# **River Thames Scheme**

# Walton Bridge to Richmond (downstream of the proposed flood channel)

Workshop Word for Word Report

November 17th 2016



Professional workshop facilitators:

Lucy ArmitageDialogue Matters Ltd.Joel PoundDialogue Matters Ltd.Laurence TrickerDialogue Matters Ltd.

Volunteer small group facilitators:

 Gemma Carey
 GBV

 Andrew Todd
 GBV

 Vicky Lutyens
 GBV

 Kerry Quinton
 GBV

 Jenny Marshall-Evans
 GBV

 Ed Ferguson
 GBV

Colette Walmsley

Laura Littleton

Environment Agency

Leanne McKrill

Environment Agency

Liz Etheridge

Environment Agency

Typed by:

Gemma Carey GBV
Andrew Todd GBV
Jenny Marshall-Evans GBV

Sorted by:

Gemma Carey GBV

Lucy Armitage Dialogue Matters Ltd.

Checked and sign off Dialogue Matters Ltd.



# **Contents**

1	About the workshop and this report	3
<b>2</b> 2.1	Vision Question  Its 2030 and you are chatting with people about how much better things are now if a flood	4
	happens. Why what pleases you most?	4
3	Question & Answers session following presentation	6
4 4.1 4.2 4.3 4.4 4.5	Sharing Knowledge Consider the weir options Information Local Flooding - Tell us your 'on the ground' knowledge Mapping communities Flood Storage on the Ham Lands	8 9 10 20 21
5	Session 2: Community Resilience Measures	23
5.1	What information would your community/interest group like to know as we approach this work?	23
5.2	What types of information will your community/interest group be able to provide to help us progress and develop this work?	26
5.3	What do we need to factor in when considering the location defence options (permanent, temporary and PLP).	28
6 6.1 6.2 6.3 6.4 6.5	Community flood plans  What are the benefits of having a flood plan?  What happens if we don't have a plan?  What would you like to be covered in the flood resilience plan/s?  What support would you like to help develop a plan?  Response Form (Number each response)	30 33 34 36 38
7	Session 3: Enhancements	42
7.1 7.2	Look at the six maps: What do you think about what you see? Based on everything you have heard, what other benefits would you like to see designed into	42
7.3	the local flood solutions if feasible? Ongoing communication and engagement	57 62
8	Parking Place	64
Annex 1	Workshop Agenda	66
Annex 2	List of Attendees	69



## 1 About the workshop and this report

#### Purpose of the workshop

The purpose of the downstream workshop was to hear from local residents, businesses and organisations to understand their views and gather their knowledge on the best solutions for Walton Bridge to Richmond, the area downstream of the proposed new flood channel. Views from all participants, representing a wide range of interest groups, were recorded on the day and will be taken into consideration.

#### About this report

During this workshop, facilitators wrote up the essence of everything said on flip charts, or participants directly contribute their points by writing on 'post-it' notes or forms. Following the event, all these outputs have been typed up 'word for word' as written.

Once typed, we have sorted and clustered the points within each conversation so that similar points are together. We do this because conversations don't progress in a linear way but go off at tangents, circle back and change direction suddenly making discussions reported in this order, very hard to understand. By sorting similar points together, the main topics and themes of the conversation become clear.

The method we used to sort and arrange the outputs is called 'emergent processing'. This means we do not organise the text to pre-set expectations or titles but see what emerges. The ideas could have been grouped differently or different titles chosen, so no weight should be attached to them.

This report serves as a record of what people discussed, and an *aide memoir* for those who took part in the workshop, but the contents are inevitably quite cryptic in places. We recommend that it is not used as the main means of communicating with non-participants.

This report follows the same order as the event.

Acronyms used in this	Meaning
report	
AOD	Above Ordnance Datum
EA	Environment Agency
EU	European Union
CFP	Community Flood Plan
CRM	Community Resilience Measures
LPA	Local Planning Authority
PLP	Property Level Protection
RIB	Rigid Inflatable Boat



#### 2 Vision Ouestion

# 2.1 It is 2030 and you are chatting with people about how much better things are now if a flood happens. Why, what pleases you most?

#### 2.1.1 Defence / Structures

- Flood planning and defences are ahead of the flood risk and I have confidence that the structures are in place to keep them there
- We see the flood channels and defences working and responding agencies seem organised and let us know what is going on. We know the defences work and have confidence in the authorities.

#### 2.1.2 Scheme Resilience

- Prevention on the day and the aftermath all of this important
- Greater understanding and resilience to flooding for residents. Properties still at risk but have in built measures to their properties
- RTS is resilient
- A better local understanding of natural processes and wetland function. Improved local flood resilience

#### 2.1.3 Communication

- Communication network afterwards. Utilities and media after flooding
- Great communication between organisations and working in partnership. The sharing of information
- Good warning and knowing what to do and where to go.
- Communication and advice given to affected areas
- Communication prevention, mitigation, action plan-safety help, insurance
- Link in alerts to all gauge heights have them ready in a table for information
- Communication and advice given to affected areas
- We have better understanding and predictability of when the next flood occurs
- Division of responsibility (aftermath) between say Boroughs and Thames Water-Street drainage etc. suffers. Maintenance of help phone boxes seems to be neglected, often broken. [Help phone boxes] Needed if mobile systems or broadband not working

#### 2.1.4 Planning

- People are secure in the knowledge the country's government helps make their lives and property secure and safe
- Planning gaps! Surrey County Council, Local Planning Authority, Environment Agency applicant meets / neglects. LPA is not the expert and all material planning conditions addressed? No! Local people want to plug the gaps with the various authorities. More rigour for planning in flood plains.
- Can we please have more robust flood risk assessment in planning applications? If in zone should have topographical maps. AOD height on buildings and of Environment Agency levels

#### 2.1.5 Personal views

- People can get to work and enjoy their homes.
- January / February 2014 is a distant memory, never repeated, never again as high
- People are living where they want to live
- That insurance companies have acknowledged the much reduced risk and dropped premiums
- People come from the Netherlands to learn about flood risk from us



#### 2.1.6 Location Specific

- How many additional days will red boards be in effect on the Sunbury to Teddington Reaches
- How will the flow rates between Molesey and Teddington be affected



# 3 Question & Answers session following presentation

Following a welcome presentation by Nathan Fahy (Environment Agency); as well as two joint presentations by Emma Booth and Rob Fraser (GBV), and Vicky Kettley (Thames Barrier) and Sarah Campbell (TE2100), there was a question and answer session. The accompanying 'Question and Information Requests' document expands on several of the responses below and also includes additional questions recorded during the workshop.

- The modelling all seems to be fairly high level. My concerns are very micro! Impact on river flows over a 100m depth immediately below Molesey Weir C. What micro modelling has or will be done?
- A The model is very detailed. We are happy with how this model represents flood predictions. As far as we are aware it is the most detailed model in Europe. [It is] within a 10m2 accuracy when the 1D 2D model is used.
- Q What steps will be taken to ensure no contamination of the river when [the] channel [crosses] former landfill?
- A It is a key aspect of the ongoing engineering design, solution to reduce leachate in water. Sheet-piling with aim to prevent cross contamination. Groundwater model to reduce impact on Lakes and groundwater under development
- Has your survey of high risk properties been completed i.e. you have identified all properties that fall into the category? I am asking this as an Eel Pie Resident.
- A No not yet. Additional threshold data is being collected. hydraulic model will use this to confirm properties.
- Q Which ones [properties] are high risk?
- A Environment Agency are collecting data to inform this part of the purpose of today is to help identify if there is anything we have missed
- Q For one of the communities for whom there have been no appropriate PLP flood defences, will all options be looked at going forward?
- All options [will be looked at]: CRM [will be looked at first]. Where this is not feasible PLP will then be considered.
- This workshop seems to focus on ] Shepperton to Teddington. Eel Pie Island is further downstream. Is it being considered
- A The impact of the River Thames Scheme downstream of Teddington is being considered.
- Can you completely confirm that the TB will continue to be used for fluvial flood risk until 2034. Does this mean you have changed previous undated policy that the Thames Barrier will be used substantially less for fluvial risk and that we must look to our floodplain.
- As per the recommendation in the TE2100 plan we [will] continue to use the Thames
  Barrier to assist fluvial flooding up to 2034 while it is necessary and safe to do so up to
  50 per annum. Hoping to remove the need through alternative protection which will
  allow us to make the change early
- Q What ideas are there for options to mitigate flood risk in the west London section post 2034 only 10 years after completion of the RTS in 2024?
- We do not know, that is the point of this piece of work. The models should help to provide information for this.
- What is the] Estimated cost of the work carried out so far. Including modelling, survey work etc.
- To date £19million This includes Property protection installed, ground investigation, design. A business case has been submitted for approval by Defra and the Treasury for 36 million to develop the OBC [Outline Business Case] and planning application.
- Landfill tax was discussed at the previous workshop. Has there been any process for a nil rate banding for this tax.
- A Not currently pursuing as would set a precedent. Feeds into our landscape strategy.
   [We are] trying to keep carbon reduced so better to use on site
- How much consideration has there been given to the impact of the scheme (increased flows) on sport river users during winter. Some 300,00 to 450,00 person outings Sunbury to Teddington



- Flows only increased by maximum 2-3% when weirs are all fully drawn, and red boards are out.
- Q What about boat moorings? Is there any scope to include these?
- A Within the wider scheme yes.
- Are residential and commercial boats being considered? [In relation to PLP]
- A Will be looked into and fed back to stakeholders.
- Has an environmental survey of Ham Lands Nature Reserve been undertaken. Re the proposed excavation of the channel.
- That's part of the next stage of the work. Building on the floodscape work from 10 years ago.
- Shortcuts like the jubilee river are proposed will the 'overtaking' water create a bulge that might overtop river banks when it re-joins the Thames? Did this happen with the Jubilee River?
- A Gates at new [RTS] channel outlets will open and close [so that] no sudden surge expected or proposed.
- Q What level is the scheme protecting to?
- There is no single number [as it varies] depending on location or property and on flood levels. [The RTS channel is] different to a flood wall river function. [The channel will capacity is] 1:20 level or 150 cubic metres per second but [the flood channel] will bring benefit in larger events.
- What is the policy on measures that help one area but at increased risk to others
- A The whole purpose of the scheme is supposed to be zero detriment. So [we] are committed to a scheme that does not increase detriment in other areas
- In examining options at Teddington Lock have you engaged with the Teddington and Ham Hydro proposed team and if so what are the potential mutual benefits which could be realised.
- A Are aware of the proposals and the different models they have developed. [There is] a potential saving if the two schemes work together.
- Building on flood plain has this stopped? It must stop! It sets a precedent where it is allowed.
- The Environment Agency advises against it but it is down to local authorities. Maps and models [are] available for development
- Q Are businesses going to be included in the scheme to help protect them?
- Yes they will benefit from scheme. The Top 50 businesses benefiting from the scheme have been identified and will be asked to contribute to the scheme. Focus will be on the Top 7 and then the remaining 43 businesses to be persuaded to contribute.
  - No [PLP have not been installed at] commercial properties to date. Not yet determined but [will be] part of the community and businesses consultation processes.
- Q Are the RTS community resilience advisors helping with the flood plans?
- A Yes helpful meetings have already been held and prepared to help further.
- Q The RTS shows there will be minimal benefits for Lower Sunbury what additional solutions are being considered? Dredging for example?
- Dredging has been looked at but is not cost beneficial. Local community defences temporary and permanent will be considered. Estuary / fluvial working together to find solutions and will work with communities to develop.



## 4 Sharing Knowledge

#### 4.1 Consider the weir options

#### 4.1.1 Look at the weir options as they have been finalised – tell us your thoughts

#### Wildlife

Wildlife use is a positive and negative

#### Canopies

- On balance canopies seem unnecessary. Anything that can keep river vistas as open as possible with minimal structure 'on top' of the river is preferable. Lowe initial cost and less ongoing maintenance are also beneficial.
- Canopies much preferred gives a traditional look and feel. Offers mitigation against otherwise harsh concrete steel structure
- Canopies preferred but add solar powered discrete red lights for warning boats at night
- No [weir canopies could be]havens for anti social behaviour
- Yes [in favour of weir canopies] aesthetics, used by public

#### Cost contribution from RTS

 Would RTS contribute to cost of Teddington Lcl Hydro Power Scheme if it reduces the cost of RTS to 3 gate options

#### Recreational benefit from fish passes

 Make fish passes that planned at weirs to be combined with canoe/fish passes as a recreational gain. As installed on the River Medway, River Thames at Radcot

# 4.1.2 Do you think we should add canopies over the weirs? (Fill out docket to give us your views)

	Canopy	No Canopy	No Preference
Sunbury	1	- 1	- 111
Molesey	- 11111		1
Teddington	1	- 111	- 11

#### 4.1.3 Do you have any other comments or Ideas on the Weir Proposal?

#### Sunbury weir visibility

Sunbury weir Vista from Kings Lawn barely visible

#### River flow rate

- Can we run the river 'lower' but with more increased flows [discussion about using new weir gates at times before flood event hit]
- How will the Scheme affect flow rates below Teddington, To Putney

#### Weir transport access

- Access for vehicles etc. could be an issue during the creation of a new weir [re Sunbury weir
- I was involved in trying to change, modify, improve existing structures across the river to facilitate pedestrian cycle access across them. E.g. Sunbury Weir. The purpose being to reduce use of roads, limited to only 2 crossings (HC Bridge and Walton). Benefiting local trips North / South across the river. Where possible can this be considered?

#### Lock management

Will the Environment Agency man Locks 24/7 during the winter? If not how will locks be managed sufficiently responsively?

#### Smaller/cheaper hydro units

 Have you thought about asking Ham Hydro to put smaller / cheaper hydro units along overspill section at point 3/3a - copy Romney Design. Probably acceptable to everyone as no environmental noise etc. That would release weir section by



Lensbury Club (Hydro Location etc.) to become a major increase in flow and remove the need for current option 1 which will have adverse effects on boat moorings and businesses

#### **Teddington**

- How will increased capacity at Teddington Lock help flow at high tide? The water flows upstream over the weir then!
- At Teddington it is essential to go for the most added capacity (Option 1 / 1a) to minimise flood risk
- Teddington 1 / 1A preferred. Sunbury option 4 preferred

#### Fish passes

- Fish passes to be combined (conjunctive) canoe / fish passes as installed on the River Medway
- Fish Passes should be incorporated in to weirs, Not removed

#### Molesey weir

- Re Molesey weir option 6: When will further study re concerns of whereabouts be performed? Please let me know (41).
- If Hurst Park is used for compound for Molesey weir works, can restoration include a petanque (Boules pitch)

#### Electricity generation at every weir

 Why not concerted effort to put electricity generation in at every weir. 1000s of gallons there all the time – wasted energy.

#### 4.2 Information

#### 4.2.1 What do you want to know?

#### Channels

- More about engineering of channel base when it crosses former landfill land.
- Do channels always have water in them?
  - > Habitat availability needs consistent flow through channels
  - Can provide valuable wildlife habitat

#### Sunbury preferred option

- Would like to know if the preferred option at Sunbury is the one that will go ahead.
  - Why would it deviate from the preferred option?

#### Lock gate redesign

 Could lock gate be re-designed so both sets open at the same time? This would be a much cheaper option than rebuilding weirs.

#### Property flood risk

- Can we have feedback to property owners on the doorstep surveys carried out in July 2015 so that we know how severe our risks are and what to do about it? (15)
- More graduality in terms of AOD.
  - Does a particular group of houses need to be worried for a particular flood event?

#### Property flood protection

 Could the lower Ham road properties between Bank Lane and Lower Kings road be protected by raised 'speed humps' across the road (and perhaps pavements)?

#### **River levels**

 Gauges – hard to find. Would like information about river levels. Would like link to these gauges in alert emails for the entire river.

#### Additional energy production

 Any new hydro-scheme that can be incorporated – additional energy production opportunities (i.e. turbines).

# 4.2.2 What would give you confidence about the solutions we are exploring for downstream areas?

#### **Engineering plan**

Engineering plan

#### Impact on permanent residential houseboats



 Very concerned that the impact on permanent residential houseboats has not been considered. Additional flows have significant impact (specifically north of Ash Island and interaction of water from weir A and B meeting C).

#### Working with local landowners

- Working with local landowners, talking to them and keeping them up to date.

#### Close gaps in planning system

 Close gaps in planning system – Surrey County Council, Local Planning Authority and Environment Agency, regarding building on a flood plain and riverside.

#### Impacts of increasing flow

 Increasing flow, how does this effect levels at Teddington? What is the real figure when Thames Barrier is closed? Difficult to believe that change is negligible.

#### Resistibility of Thames Barrier

Why is Thames Barrier considered to be worn out? By greater than design use. Why
should it matter how many times it's opened/closed.

#### Validation of modelling

- Sceptical about accuracy of modelling. So strong validation and evidence required. Especially on local impacts. Impact of water flooding and re-entering Thames via relief channel. What effect does that have on total flow immediately downstream?
- Need to have greater positive effect to allow for errors in modelling of levels (rather than flows).
- More access to modelling and scenarios preferably bespoke/community led.
- More validation of models. Have team carried out this sort of modelling in other rivers?

#### Desborough Cut bridge widening

- Widening of bridges at both ends of Desborough Cut.

#### Workshops offering explanation

 Events like this give confidence due to detail and explanation. Explaining broader principles. Participants can feedback information to groups they represent.

#### Case study examples

Comparisons with other rivers

## 4.3 Local Flooding - Tell us your 'on the ground' knowledge

#### 4.3.1 What are the flooding issues?

Q Where are the flood issues? Please look at the flood maps – does this match your experience?

What do you agree with? What do you base that on? What do you question? What do you base that on? Are there gaps in our knowledge? What do you base that on?

#### **Duration of flood**

 Duration of flood – excessive to move around (e.g. businesses/work/shops) for two months of flooding (December to February).

#### Risk of lives

Risk of lives in moving about islanders on Thames.

#### Community support during floods

 Community Resilience Advisor (Environment Agency) community support during flood to help residents.

#### Pre-flooding evidence

 Wheatleys Eyot - Flooding always seems to start with evidence of groundwater under properties and the centre of island. Then river breaks banks and travels across island to backwater.



#### 4.3.2 What were the sources' of 2014 flooding in your property / locality?

#### Fluvial flow

- River flood/fluvial
- Thames 'Bore' Molesey Hurst Park fluvial flow pushes up

#### **Lack of Culvert Clearance**

 No clearance done of culvert in the River Thames Canoe club car park (Environment Agency)

#### No Thames Barrier use

January 2001 – no Thames Barrier use; October 2003?

#### Increase in water mass

- Increased rainfall
  - > Haul leading to high flows
  - Landscape change trees/grassland
  - Groundwater flow

#### **Drains flooding**

Drains flooding - Dorney Grave overflow from river in 2014

#### Bridge restructure

 Bridge at beginning of Desborough Cut (upstream) caused a bow wave due to bridge restructure.

# 4.3.3 Where are the flood issues? Please look at the flood maps – does this match your experience?

#### Desborough Cut: What do you agree with?

- Generally agree with this
- Agree with dredging under bridges
- If any banks cut back the North side preferred with Northern Bank and Landscape measures.
- Desborough Island habitat enhancements, scrapes, wetlands woodland, grazed meadows
- Agree with Northern Bank linked to Beach Creation, clumps of new trees, riverbank naturalisation. Would help to reduce antisocial behaviour.
- Desborough Island Historic Restoration linked to palace
- Important to keep amenity of Thames Path on South Bank



#### Desborough Cut: What do you question?

- Disagree with Widening of Northern Bank
- Impact on Thames Meadow
- Disagree with Southern bank cutting back
- Yearly monitoring of silt up to determine flood risk and dredging not just every 10 years
- 1 No flooding here in 2014 / 15
- 2 Did not flood

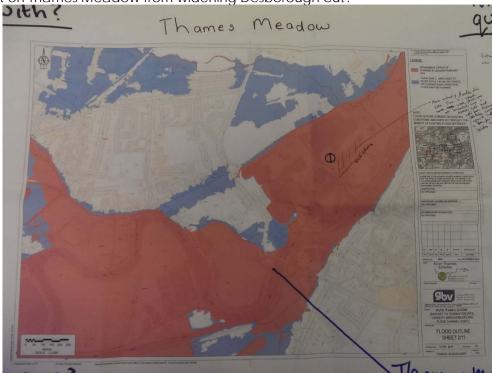




#### Thames Meadow: What do you question?

- Extent of 2014 flood seems to wide. South of Ford bridge was not as effected as map shows
- What does the model show in terms of options for Desborough cut?
- 1- Maximum extent of Flooding during 2014. There is a small earth wall which was not breached and as far as I know held back water from fisheries. Felix Lane open to traffic as far as Holiday inn

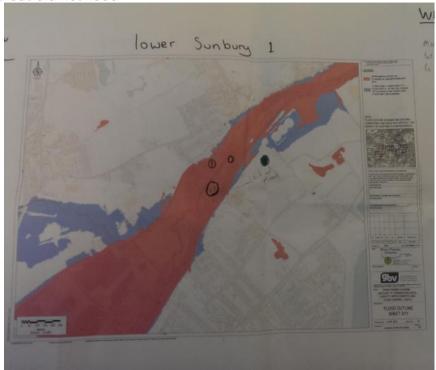
- Impact on Thames Meadow from widening Desborough cut?





#### Lower Sunbury 1: What do you question?

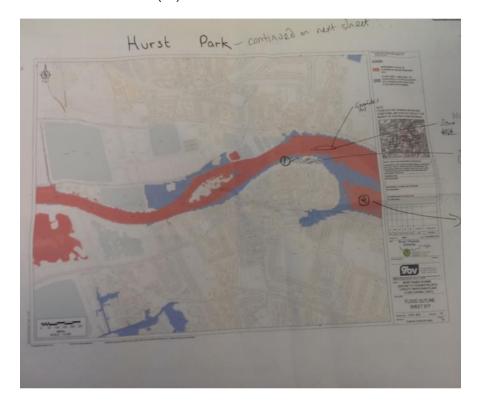
- Middle Thames Yacht club building and Lock did not flood but land based mooring was underwater
- 1 These areas did not flood





#### Hurst Park: What do you question?

- Flooding of Hurst Meadow in 2014
- Entire Meadows filled up. Did a good job!
- Flood area not entirely accurate
- No houses were flooded [on Garrik's Ait] although nearly in some cases!
- Some houses did not flood in 2014.
- 1 This area flooded in 2014 (Houseboats in Danger) Not all shown section flooded much still open. Reached upper towpath.
- 2 Photos of this area in flood 5b (13)



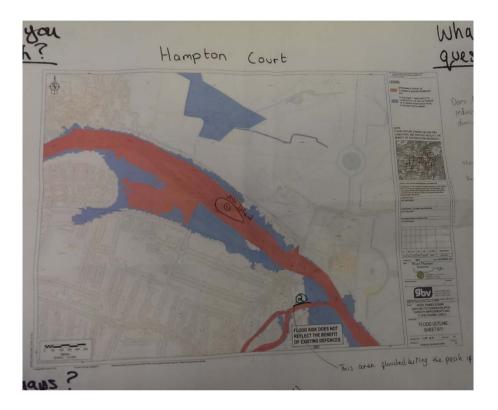


#### Hampton Court: What do you question?

- Does the model consider the reduced flows over Molesey Weir during the upgrade? (shutters in place)
- There was more flooding near Hampton Court Rail Bridges

# 2 - This area flooded during the peak of the 2014 floods Hampton Court: Are there gaps in our knowledge?

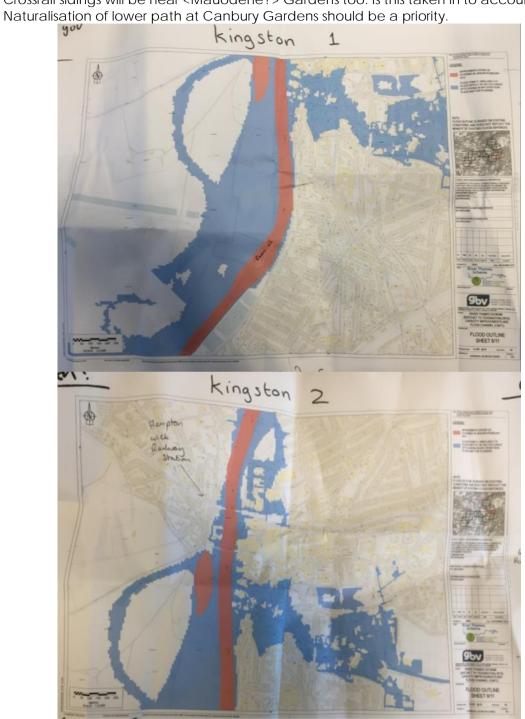
1 - Ash Island did not food in 2014 most was 2m above river level





#### Kingston: What do you question?

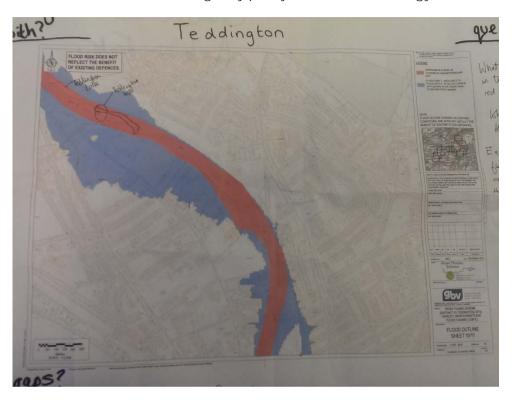
- What water level is used to give the 1 in 100 flood map for Kingston
- What about Crossrail 2 and Kingston Railway Station being moved nearer to Riverside and Cromwell Road Bus Station being moved too?
- Crossrail sidings will be near < Mauodene? > Gardens too. Is this taken in to account





#### Teddington: What do you question?

- What is the flood level in terms of AOD for the red and Blue flood zones?
- What about drawing a map of Hampton Wick
- Environment Agency should be thinking beyond just flood control and management and taking the opportunity to harness the energy in the flow of the Thames for sustainable electricity production.
- What is the Environment Agency policy on renewable energy and climate change?





#### Ham Lands: What do you question?

- Must from a component of a wider more comprehensive ecologically based proposal for Ham Lands north
- 1- Localised 'ponding' on Ham Lands in 2014 Possibly arising from higher water table
- Improvements of towpath as proposed in Richmond Localisation should include culverts to facilitate flow into Ham Lands.
- The rubble came in by barge it should go out by barge. Sir David Attenborough at AGM of TLS.
   The rubble can be used downstream in Thames Estuary for building lagoons to house hydroelectric turbines. Rubble is 103 acres of floodplain and some 5 metres in depth. Eel pie residents would appreciate the above
- Excavating Ham Lands would not be detrimental to view from river. Towpath is heavily vegetated.





# 4.4 Mapping communities

#### 4.4.1 What criteria should we use for identifying communities?

#### North Side of Desborough Island

- North Side of Desborough Island. Including Thames Meadow

#### Communities

- Areas / communities that have a flood group set up
- Communities particularly affected by surface water flooding

#### **Environmental groups**

- Identify environmental community groups I the area
- Joined up engagement with Wildfowl and Wetlands trust (16)

#### Schools/Education

Schools/ Education

#### Specific existing groups

- Talk to residents association. I.e. Lower Sunbury residents Association
- Consult the River User Groups to obtain input for users

# 4.4.2 Are there existing groups if so what are these and who are the group leaders/figure heads/go to people/key players?

leaders/rigure rieads/go to people/key players:					
What?		WI	Who?		
_	River Ash Residents Association	_	Richard Endersby / Catherine Casey		
_	Lower Ash Estate	_	John Douglas		
_	Teddington Society	_	Donald Bell and Brian Hader		
_	Sunbury court island	_			
_	Fordbridge park Mobile home Site	_	Derek Langdridge (managing company)		
_	Hampton and Molesey Riverside Trust	_	Cllr Suzette Nicholson		
_	Friends of Hurst Park	_	friendsofhurstpark@gmail.com		
-	Garriets Eyot / Taggs Island residents Association	_	Through friends of Hurst Park		
_	Portmere Park and District Residensts	_	Miles Macleod		
_	Hampton Court Palace	_	Nigel Randall plus one other		
_	Ham Riverside Lands Ltd - Resident	_			
	management company for Waton Estate				
_	Locksmeade Estate Also has a residents	_			
	group				
_	Molesey Residents Association	_	Ernest Mallet		
_	Parke Road Residents association	_	Amanda Boat		
_	Wheatleys Ait	_	Neil Huntingford		
_	Sunbury C and Island	_	Peter Robinson		
_	Thames meadow	_	Mike Sedgewick		
_	Thames Side, Laleham	_	Genny Morris		
_	Sandmills Meadow . Las Palmas	_	Adrian Seas		
_	Twickenham Society	_	John Perry		
_	Richmond Environmental Information	_	John Perry		
	Centre				
_	River Thames Society	_	John Perry		
_	Kingston Environment Forum	_	John Legate (He can provide		
			information of further groups at a later		
			group)		
_	Hampton Wick Association	_			
_	Hampton Wick and Teddington Police	_	Christina Lore (HWA member and Sec of		
	Liaison Group		Hampton Wick and Teddington PLG)		
_	Lower Sunbury residents Association	_	Neil Huntingford Committee, Paul		
	, and the second		Thompson chair		
			•		



 River Users groups 16b Kingston to Molesey, 16a Kingston to Teddington, Another one (Molesey to Sunbury) Steve Collins

#### 4.5 Flood Storage on the Ham Lands

#### 4.5.1 What are the benefits of using this area?

#### Connecting people with wetlands

Connecting people with functional wetlands

#### Education

- Improving understanding of wetland benefit
- Environmental education resource classroom

#### **Supports local interest**

Opportunity to help support existing local interest

#### Increase wildlife

- Opportunity to enhance the habitat by increasing diversity
- The range of habitat could be increased that are suitable for a floodplain
- Design could enhance wildlife and visitor benefits
- Creation of a network of backwaters connected to Thames providing both fish refuge and wildlife benefits
- Wetland shallow ponds and scrapes bird huts?

#### Historic landscape restoration

Additional benefits – historic landscape restoration

#### Opportunities from management

- Opportunities for long term management options ie 'floating herd' to extend grazed wet meadow areas/ restoration of elements of Secrets Farm
- This is a rather boring area that has evolved 'naturally' a more proactive and managed approach to its nature conservation potential would bring variety and interests

#### Recreation

- Recreational activity could be enhanced.

#### Floodplain restoration

- Seems a suitable option to create areas that can be flooded in a controlled way
- Restoration of lost floodplain

#### **Unharmed views**

 Won't affect the view from the river. Towpath has lots of vegetation. Disruption to landscape we are planning 20.30. 50, 1000 years the landscape, albeit different will be restored

#### 4.5.2 What are the dis-benefits?

#### Space

- Loss of local space
- Opening up of landscape
- Temporary disruption of landscape but creative design can mitigate any temporary loss of green space
- Potential Loss of enclosure

#### Loss of amenity value

- Perceived loss of local amenity value
- Worried about change. Favourite dog walking area

#### Engagement and communication required

Engagement and communication required to help inform benefits

#### Thames mariners impacted



Potential impact on Thames young mariners base from additional flood risk

#### Wildlife impact

Impact on existing species and habitats

#### 4.5.3 What do we need to know to consider this option in more depth?

#### Value of wildlife

- A comprehensive ecological survey of Ham Lands Local nature reserve (i.e. formally designated in the Local Plan) to establish the value of Ham Lands North
- Existing wildlife value

#### Value of local space

- What value local people put on space
- What local people currently and would like to use the space for

#### Management and engagement support

Help and support for future management and engagement opportunities

#### TLS background

- Thames landscape strategy should be considered it has lot of good background information
- The TLS keeps a record 25 years of previous plans and consultation that is fab background - This Scheme was originally proposed by them 15 years ago

#### Historic land use

- Understood to be landfill need to establish this is the case. Was It part of the area used for gravel extraction
- Geology and landfill materials. Suitability for creating wetland

#### Safe walking routes

Safe walking routes across potentially flooded areas

#### Land border clarification

 Clarification that the area is only Ham Lands Northern section and not lagoon and southern Ham Lands

#### Other

- Also part of a significant dark area along the Thames

#### 4.5.4 What should we do with excavated material?

#### Re-use for landscape

- Can excavated materials be used to increase the bank heights in vulnerable areas? So create banks to create water storage tanks
- Use some material for landscaping complementing the TLS depends on volume and where proposed – but only as part of an overall landscape plan for the area
- Build banks up to create new balancing ponds store water and managed release, wildlife havens
- Careful selection of soil / material reuse low grade / sub soil to be used for wildflower / grassland benefits. Nutrient rich soil for tree / shrub planning
- Landscape screening consider WWT WW Centre as a design influence

#### Transport via water

- Remove material excess by barge
- If it has to be taken off site move by water
- Martials removed by road likely to clash with major proposed eight year redevelopment scheme (Ham Close) over very restricted access routes

#### Keep it simple

- Keep it simple. No need to overthink or over engineer



#### 4.5.5 Flood storage at other locations - where else could be considered?

Location	<b>©</b>	8	Comments
<ul><li>Molesey Wetlands (TWUL Waton AWTW)</li><li>Ham Lands</li></ul>	<ul> <li>Currently used gravel extraction</li> <li>Nice place for walking at present. Will they be restored</li> </ul>	<ul> <li>Over wintered birds impacted</li> </ul>	_
– Ham	<ul> <li>What about new proposed housing development of houses in Ham</li> </ul>	_	_

## 5 Session 2: Community Resilience Measures

# 5.1 What information would your community/interest group like to know as we approach this work?

Group 1, Group 2, Group 3, Group 4, Group 5, Group 6

Issue	Location
<ul> <li>This floods in a 1 in 20 year flood – need bund/barrier 50cm high. Would prevent flooding in current levels for 1 in 50 year flood.</li> </ul>	<ul> <li>First Desborough Bridge –         upstream round to         confluence of Wey, 100m         upstream of Wey –         Jessamy road</li> </ul>
<ul> <li>No PLP flood defences offered - nothing appropriate. Environment Agency look at further defence, will they look at all options? Or restricted by funds so able to consider electrics, floating, sealing waders!</li> </ul>	<ul> <li>Trowlock Island</li> </ul>
<ul> <li>Earth been required on boundary of Shepperton Marina to prevent flow into estate.</li> </ul>	<ul> <li>Shepperton Marina/ River Ash Estate</li> </ul>

 Property threshold taken by Environment Agency need to be accurate given flows in data capture – main living area, not just access point.

#### River levels

- Estimate on level of increase rise how close will water be?
- Estimated river levels (short term and long term) how much worse it may get.
- Frustration getting blank wall on how much water and what next.

#### Communication between groups

- Interested in a timeline of how we propose to communicate with different communities. Clarity over timelines of when people would be in touch
- Need to know specific Environment Agency/Local authority contact details department and name. Key individuals within community to know.
- Advice on who should community flood plans be shared with (outside of community)?

#### Communicating emergency

- Expected to know the emergency contacts in time of flood.
- Is there a warning siren?
- Who should be contacted in the event of a flood (including out of hours)?



#### Community engagement

- Aware of things that can be done e.g. barge boards. Things that communities can
  do for themselves.
- What is going to be the impact on me? Part of remit of authorities to keep communities informed.
- Facilitation for sharing best practice between communities (facilitated).
- How much input do communities have to deciding what help they get?
- What if there is a proposed solution that nobody wants? Environment Agency have legal right to do survey and work.
- Role of Safer Neighbourhood Teams (SNTs)
  - Do groups outside of Surrey have this?
  - May have role, information about communities
- Thank Environment Agency for taking initiative of drawing people together should have been done before.

#### **Timescales**

- Reassurance and plan knowing that things will be in place.
- At what point certain things should be done.
- Timetable as affecting local area when will it happen?
- Broken down into different areas/communities
- Ham fields removal of rubble so many initiatives but nothing happening who will be in charge/have final say and when will this start?

#### Flood protection options

- We don't necessarily know what we need to know information.
- Information on what is available on Environment Agency website.
- National Flood Forum may have information have produced useful book.
- Useful to have products more readily available
- Some residents even when informed have not responded to information about products
- What is going on would be useful to clear statement on website.
  - What is readily available, more readily available.
  - Focused and coherentc
- Localised
- See something being put up on other bank want to make sure you have been offered it – been approached to decision making.

#### Temporary defences

- Who is responsible for maintaining/operating structures e.g. temporary defences?
- Someone checking they are OK to be 'rolled out'.
- Look at temporary flood defence near Trowlock Island Middlesex side how do these work if they affect somewhere else?
- Checking that temporary defences don't have detrimental impact on others (Environment Agency)
- If it doesn't affect others how quickly would it go up/put down? And how long would it be up for all winter?
  - Must be quite a lot of work to be put up/taken down.
- Separate project temporary defences put up trigger level is met.
- Where would temporary barriers be stored?
- What are trigger levels? Bring out, deploying, taking down.
- Need to know if defined line or route of defences. Are routes of defences communicated to?

#### Permanent defences

- How do we go about getting permanent defence solutions in place?
- Permanent and temporary defences and other measures
- Scope need to know what the scope of the measures are

#### Historical flooding

Historical experience of flooding can be fed in.



#### Consequences of flooding

- Relationship with water and how dangerous it is immense risk.
- People risk their lives. Levels not always appreciated by authorities.
- Need to be convinced that real problem likelihood of flooding and consequences of flooding
- Consultation done on people's perceptions of flood risk.

#### Risk areas

- Haven't yet identified areas at risk.
- Approximately 1000 properties stated at risk? Which properties remain at risk after Scheme built? These will need the most support.
- Information e.g. is there a particular area/property at risk?
- Who owns assets small scale?

#### **Engineering work details**

- In-depth engineering plans what they're going to build channel out of to ensure no contamination.
- Installing equipment, new to builders.
  - How can it be checked if it is being installed properly
  - Need an approved list of installers
- Sewers need to be considered. Would defences be undermined by sewers?
- What is being done to raise river bank in area between D'oyley Carte Island to Western reach of Desborough Cut to avoid flooding and by whom?
- What extra work is being done to help most vulnerable communities?
- Does this work include services? I.e. electricity/sewage/utilities.
- Trees cut down near Ham fields
- No one seemed to know about this including Environment Agency
- Trowlock Island Ferry rises in flood council put in scaffolding but needs to be in planning platform.

#### **Household impacts**

- Environmental impacts (e.g. flooding gardens) how do you deal with environmental risks regarding flooded garages and gardens etc.?
- How can backing up of toilets be prevented?
- What threshold point will power/utilities turn off for pumps etc.?

#### Access during floods

- People concerned not getting to boats
- One issue is access to houses rather houses flooding could we position defences to maintain access routes?
- Access to island could we have a platform to maintain access?

#### Accurate data

Accurate data/timetable/level

#### River users

- Priority of river users
- Recreation use of river and flows
- Please could Environment Agency take consideration of river user's needs

#### EU should be in charge

EU should be in charge

#### Other

Environment Agency – stance on garage/flooding property threshold?



# 5.2 What types of information will your community/interest group be able to provide to help us progress and develop this work?

#### Group 1, Group 2, Group 3, Group 4, Group 5, Group 6

Recount what happened in flood - notes/video to recall what happened.

# Issue - Speed/flow of water across path not safe for elderly/young. - Styles of building design in area – advice from Environment Agency/council/planners etc.? - Location - Trowlock Island

#### Refuge areas

- Where is safe area where can we move to for safety?
- Safest place (e.g. church) location due to age and historical knowledge
- Sports club as refuge/space
- Safe refuge points

#### Community flood groups

- Value of community flood group?
- Community group may not be reactive enough early warning would help
- Community flood plans if they already have one
- Resources which communities and businesses can offer, e.g. 4x4s etc.

#### Flood warning communication

- Emergency services first response
- Flood warning crucial their response by community group, then emergency response.
- What the communication mechanisms are <Environment> Agency, Emergency Services - when need to evacuate, how that's communicated.
- Before event/during event how we communicate differs. At which stage do we want information?
- If predicted, then hope Scheme would have line to ring for information. We currently ring lock keepers.
- Environment Agency will issue flood alerts/warnings (line to phone needs to be better publicised)
- Warning systems need to be improved specific water level details for each house provide AOD for each house, could be to postcode level.

#### **Contact information**

- Who to contact?
- Community centre access for refuge contact
- Contact numbers key contacts for passing on information within community and outside community.
- Update on contact information to ensure it is up to date.
- Contact points
  - Police gold, silver and bronze
  - > Environment Agency should have this particularly with police.
- Contact details of local groups
  - Streets
  - Neighbourhood watch
  - Who officers are
- Line to community officer in an emergency?
- Who are the resilience officers?

#### Flood defences

- Sandbag store
- Permanent flood defences have failed in major floods



#### Local knowledge

- What <Environment> Agency likes are people that live there/have knowledge gives us into e.g. fixed defences/temporary defences, what will work/not work e.g. what can we do to help with boats?
- When model is completed ground truth ask local community to validate
- Local knowledge of land
- Community best people to work out where temporary defences should go.
- Local maps
- Local knowledge key to knowing what to do
- Question seems the wrong way around initiative should come from us.

#### Knowledge from past floods

- Feeding in experience of 2013/14 flood.
- Environment Agency learns so much from people who have been in a flood.
- Doesn't have to be last minute can do that now.
- Flood ambassadors in 2013/14 were great.
- Islands stranded couldn't get to talk to people, haven't seen flood ambassadors.
- Getting information to flood support officers.
- Local knowledge of what happened on previous occasions
- Clarity on which level we are protecting against difficult to visualise above 2014 levels

#### Historic floods

- Historical flood records on flood levels experienced previously.
- Historical information
- Photographs/videos

#### Lock keepers

- Lock keepers fabulous
- Lock keepers key at time of flooding many are volunteers.
- Difficult reach
- Depending on lock keeper
- What do you want from a lock keeper? Can look to see how else to get this information to you

#### Safe access routes

- Safe access routes
- Good practice
- Issues regarding emergency access for isolated community groups i.e. Islands.

#### Vulnerable people and assets

- Vulnerable residents e.g. disables or those needing medical help (e.g. disabled or those needing medical help – Environment Agency or Local Authority?
  - Also in the event of a power cut
- Vulnerable people who and where
- Animals e.g. python
- Information about vulnerable people and vulnerable assets.
- Vulnerable individuals.

#### **Property information**

- Commodity or properties where owners have installed own measures.
- Ecological information on local area/properties e.g. valued trees
- Property thresholds
- Lower Ham road floods frequently don't bother trying to protect any properties that don't need protection.
- Following of flood, ask people how high food levels are on property could be online.
- Thresholds can residents establish these themselves?
- Environment Agency find information on any lower internal rooms (i.e. cellar, basement, garage) useful as well.
- Insurance for houses

#### Communication between groups

Definition of resilience is inadequate – need collaboration so keeps on going at local



level – River Ash estate is a good example (asker of question does not have all information)

- Fire service also need to be brought in
- RSPCA
- Two way discussion of information need to report back later.
- Example of flood and residents two-way conversations
- Drainage of roads Who is responsible outside of Surrey? Different agencies?
   Information from Thames Water?

#### Implications of legislation

Brexit and implications on legislation surrounding flooding

#### Island flood action plan

An island flood action plan works

#### Other

Recount what happened in flood – notes/video to recall what happened.

# 5.3 What do we need to factor in when considering the location defence options (permanent, temporary and PLP).

Group 1, Group 2, Group 3, Group 4, Group 5, Group 6

Issue		Lo	Location		
_	<ul> <li>Identify boundaries of area (down to post codes, house numbers)</li> <li>Post codes don't always cover specific properties at risk of flooding – confusion over area name and post code.</li> </ul>	_	Hampton Wick/Twickenham		
_	Ward boundaries don't match up to areas at risk of flooding River bank and low roads				
-	Main drains going to river backing up – one- way valves not working effectively	-	Teddington		
_	Potential new buildings in flood plain – they should not have to build in resilience measures as well.  Deer in Royal park – if scared, could attack	_	Molesey, Drakes Park		
_	Access points	-	Footbridge at Teddington		

#### Access

- Access to community to continuous capabilities /living temporary response so close to community can live/safe
- Access how to get in/out if there is only a single point of access
- Safe walking/access
- School run routes
- Defences impede access either wildlife or people (recreation e.g. fishing)
- Need to think about access
- Most people re-located because you couldn't get out from house even though house is protected – transport blocked, need to consider transport routes.

#### Speed of flow of water

Speed of flow of water (2014) – elderly/young not safe

#### Flood control areas

 Which areas will Environment Agency flood, as they control the weir – increase ability to control who gets flooded – and to what level – how controls weirs will divide areas.

#### Use of boats

Surrey Fire and Rescue visited in a RIB < Rigid Inflatable Boat > - reassuring.



#### Floodplain sensitivity

- Should see the local flood plain to be retained as flood defence option, e.g. Hurst Park.
- Not to compromise the flood plain.
- No building on open land.
- Local planners overlook value of open space and flood plain. Local people are fearful of losing it.
- Planning authorities can take view within planning guidance.
- Environment Agency advice gets overlooked.
- Is it floodplain developments (defences themselves)?
- Keep to minimum required to do job as sensitive as possible for existing landscape

#### Impacts elsewhere

- Consider impacts upstream and downstream.
- Local defences in a location doesn't adversely affect flooding elsewhere affects others.
- Visual appearance of permanent defences and environmental effect. Moving flooding to elsewhere or downstream

#### Identified refuge area

- As part of project, need an identified place to go. Need to communicate to people that use area. Sometimes community group may install defence.
- Need to be possible.
- Need to not be undermined and strong.

#### **Construction considerations**

- On island, need to build houses above where they would flood.
- Construction management pinch points and traffic management
- What advice Environment Agency need to give to architects/homebuilders when designing/building in flood defence.

#### Resilience effort

- Resilience needs to be own effort as well.
- Joint approach.
- Electricity needs to be higher for example.

#### Historic land use

- Historic land use - e.g. substation, drains

#### Property level protection

- PLP does not stop flooding
- On PLP depends on construction of property e.g. single brick walls can't have barriers and will fall down
- One simplistic view of what was needed on PLP already put in e.g. not putting value under property – when flooded can't get to it, power cuts mean pumps do not work.
- If property is sold, does new owner have to keep what is put in responsibility for maintenance?

#### Community engagement and support

- Getting relevant organisation to provide help in a flood event.
  - Communities are willing to help and do work but need to know where to get resources from
- Each needs to know people in immediate community who can help in times of crisis.
   Who should take the risk?
- Not everyone within a community will agree on solutions or be aware of the problem, e.g. not aware of locations flooded and still trying to drive through.
- How do we close roads which are vulnerable to flooding?
- Consultation with community affected and local residents

#### Knowledge from past flooding

Lessons learnt from last flood – what worked and what didn't.

#### Permanent defences

- Try to locate defences to defend roads as well as properties
- Size of defence temporary or permanent
- Number of people they can protect



- Anyone on wet side of defence
- Permanent flood defence must take account of amenity or area/sympathetic to landscape

#### **Temporary defences**

- Resources to deploy defences in local community
- They have got to work e.g. enough sandbags
- Is there a bottleneck (of people) that means water will get in before defences go up?
- Communities need to have awareness of flood risk/frequency clarity over frequency of deployment for temporary barriers.
- Knowing who erects temporary defence and when they are erected is important
- Need to know trigger points for each community.

#### **Environmental considerations**

- Natural earth embankments as effective and more environmentally acceptable.
- Landscaping options being preferable to hard option mounds and barriers better than walls (site specific)
- Environmental seasonality e.g. winter wildfowl not present in summer, timing of flood.

#### **Telecommunications**

- Telecommunications locations could be affected
  - Without them, communities will not get warnings or online deliveries

#### Flood aftermath

- Waste collection
- Sanitation all sewers got block (e.g. temporary toilets needed)
- Plan for post-flood recovery
- Can be part of flood plan
  - Council might provide skips to clear up debris
  - Who collects things that may have washed up?
  - Cleaning up of silt after and contamination
  - Ground suitable for defences.
- Objects that collect and block rubbish after floods what happens to debris visual/health impact.
- Registers of dangerous materials that might be affected
- Could have pump don't think you can pump fast enough in some locations e.g. next to river in Shepperton

## 6 Community flood plans

## 6.1 What are the benefits of having a flood plan?

#### Group 1, Group 2, Group 3, Group 4, Group 5, Group 6

#### Community cooperation

- Two way communication between community at risk and those who can help it
- Communication among community so people know where they should go, what to do meaning that people can move with more speed.
- Ensures no negative impacts on others (neighbours)
- Encourages neighbours to work together and to talk to each other
- Share flood defence costs
- Neighbours are prepared together
- Gets communities to talk about other unobvious risks (e.g. manhole covers coming off in floods)
- Could be used to identify a leader or a base to congregate at

#### Increase sense of community

- Recognising who 'my community' is
- Potential to make you a stronger community
- Potential to grow communities



- Local confidence that support each other is there
- Tool to accept and embrace where we live (rather than considering moving away during winter)
- Contributing to flood relief
- Allows community to continue lives as normally as possible.

#### **Community considerations**

- EU citizens may not be included in constituency numbers (i.e. may be more people)
- Students speak different languages

#### Communication

- Pyramid of communication.
- Floodline sign up for it
- Makes sure people can stay in contact during a flood
- Knowing where to go for food
- Provides liaison both ways through coordinators and wardens
- Tool to have conversations with Environment Agency
- Good to have key contact point for community and council.
- Understanding roles

#### Information sharing

- Using standard responses with measures available for everybody e.g. information in books and leaflets available (e.g. homeowners guide to flood resilience)
- Provides a conduit for providing information to local authority and sharing information e.g. where to put sandbags.
- Could share information between commuters and across flood plans.
- Passing on information
- Available information to pass on to new community members
- Having a network of people to pass on information about flood risk/insurance
- Series of lectures, document (things flood plans could be)
- Would be good to have all borough websites

#### **Emergency services**

- Council, emergency services will be aware
- Called on emergency services tempered (so people don't all call 999 at the same time)
- And all third parties (e.g. where to get sandbags)
- Emergency services can prioritise needs more effectively.

#### Flood warning

- 2014 flood warning sand bags just turned up community didn't know
- Floodline alerts good on internet, mobile and online maps so have an idea of situation
- Are there still flood sirens? Think it would be a good idea
- Will not work unless there is advanced notice (i.e. flood warnings)

#### Flood plan development

- Needs to be kept updated more houses
- Procedure of generating plan sitting down and talking
- Bearing in mind people might be in London working and children in nursery
- Sat down and talked with residents
- Use existing groups police, neighbourhood watch, church, care homes, elderly, animal rescue society, people who clean carpets in floods/schools
- Regular updates to the plan
- Don't make the whole thing too complicated
- Having an action plan with contact details

#### Predetermined plan

- Quick coordinated action plan
- Environment Agency issue general plan
- If have advanced plan with PLP or activities that kick off at set level
- Local plan can lead to council plan know where refuge centres are which public buildings are designated



#### Positive feedback

- Evolutionary process starting from concept could install gates to complete defence lines.
- Could be used for other emergencies and double up as an emergency community plan (ECP)
- Flood coordinator is appointed

#### Raise awareness

- Raised awareness
- Safety/awareness of dangers
- Allows you to raise awareness to others or who haven't taken it seriously acts as a 'reality check'

#### Increase reassurance

- Manage panic and manage impact of level of panic
- Reduce chaos and disorder historical from previous floods
- Gives course of action in an emergency.
- Reassurance
- Security
- Makes you feel better even if it does not work.

#### Vulnerable people

- Elderly/vulnerable people identified.
- Helps to know elderly people/families in area to help police prioritise vulnerable people.
- Looking after vulnerable people
- Provides comfort to the vulnerable

#### Allows preparation

- Could you get section in shop e.g. Homebase where you could buy protection products
- Allows one to think through in advance and take on advice from others and experience
  - Makes you think of issues which one may not have considered.
- Can arrange for resources in advance which may need
- Enables community to know what resources available to help.
- Lobby for resource enabled by having a plan
- Helps empower people gives them something to follow and helps them be prepared.
- Being well prepared
- Be prepared
- Thinking ahead
- Knowing options (e.g. boats, cars)

#### Household benefits

- Do you get reduction in house insurance by having a CFP?
  - Does it imply to an insurer that you are at risk?
- Cheaper insurance (it should be)
- Could help with selling property to have information gathered together.

#### Local risk understanding

- Capture knowledge from previous flood events
- Understanding the risks in your area
- Tool to accept and embrace where we live (rather than considering moving away during winter)
- If you look at Environment Agency flood risk map, large areas and islands are probably all at risk.



## 6.2 What happens if we do not have a plan?

#### Group 1, Group 2, Group 3, Group 4, Group 5, Group 6

#### Panic and chaos

- Unmanaged panic
- Panic
- Chaos
- Chaos

#### **Uncoordinated reaction**

- Knee-jerk reactions which are less effective
- Ineffectual and uncoordinated actions
- Lack of coordination
- Disjointed response to flooding
- Confusion
- Not knowing where to go
- Measures which need to be arranged in advance or planned cannot be carried out.

#### Lack of community collaboration

- Some communities know what to do but not formalised in flood plan
- Always new people so info not shared and people left out
- If no plan, community will not learn from 2014 flood. Need to learn from past experience – have meeting to discuss and share knowledge
- Some islands had flood plans in 2014
- More significant impact on community
- Overseeing other/neighbour's properties might not know their PLP needs putting in if at work

#### Vulnerable people

- Not knowing if elderly neighbours/disabled need help
- Vulnerable people overlooked.
- The vulnerable within the community will be identified.
- Inability to contact certain residents (e.g. phones not heard by elderly)

#### **Split resources**

- Split resources
- Wasted resources
- Individual residents and local authorities
- Individual competition
- People looking after their own interests

#### Wasting time

- Wasting time
- Repetition of effort
- Frustrating

#### **Emergency service issues**

- Emergency services in chaos
- Emergency services might not have a plan for you
- Lots of calls to council, emergency services
- Resources might be deployed to wrong location (e.g. army going to wrong post code)
- Lack of local knowledge for emergency services can lead to errors

#### Health and life threat

- Injuries
- Threat to life
- Death (drowning)
- People may need medication and cannot get it in a flood
- Cholera risk



#### Increase in damage

- Damage to properties
- Maximum damage
- Potentially greater damage to life and property
- Could put life and/or property at risk
- If plan includes set up of household defences, this would reduce damage to properties and reduce overall cost of flood.

#### Increase in danger

- Increased danger
- Complacency
- Unaware if you are in a risk zone/at risk

#### Criminality

- Criminality let loose (police had to come round regularly to check properties)
- Looting (e.g. people stealing sandbags)

#### No Amenities

- No drinking water as council said we can't drink the water
- No electricity/heating for long periods

#### **Animals**

- Pets where do they go and how do they get fed?
- Charged by stag from park

#### Opposite of everything for question 2

- Opposite of everything answered for question 2!

# 6.3 What would you like to be covered in the flood resilience plan/s?

#### Group 1, Group 2, Group 3, Group 4, Group 5, Group 6

#### Community coordination

- Community level coordination, local council etc. down to them to tell you about available resources
- Community responsibility
- Somebody to coordinate
- Distribution list roles and responsibilities, availability of named people, means of contact (telephone, email etc.)
- Community area that actually cares
- Both Environment Agency and community involved

#### Support for businesses

 Support for businesses – they have different needs and different risks (e.g. valuable stock)

#### Resource availability

- Resources available in community
  - Vehicles
  - People who could take pets that need homes
  - May not leave home without knowing animals will be taken care of
- Which products are available and where to get them from, as well as cost and servicing information.
- Information on local advice on products available.
- Who has tow bars/pumps etc. locally
- How to operate resilience equipment, where things are stored etc.
- Where equipment/sand bags etc. are delivered (high ground) e.g. drain covers, waders

#### **Amenities**

- Electricity suppliers and water services will cease at certain water level need to record in flood plan
- Need to know what to do if people stay alternate supply



Electricity knocked out – when need to leave?

#### Safe areas and routes

- Where is the high ground?
- Muster point/safety area for everyone to go to.
- Where to go if you need to leave home
- Safe evacuation routes (not just immediate area wider area as well)
- Need to get across river people risking their lives
- Where you can get transferred to
- When can residents take vehicles
- Taggs Island, not able to drive out cut off.

#### Copy of the plan

- This exercise is good for raising awareness but Environment Agency template will have many suggestions in it.
- Every house in the community should have a copy of the plan to keep them in the loop and informed
- How to interpret information (e.g. glossary, list of abbreviations, technical information

#### Community knowledge

- Community plan need to know the vulnerable people
- Making valuables safe advise on how to do deal with this
- List vulnerable residents (depending on personal information being shared)
- Vulnerable people
- Whether other people already have PLP in local area.
- Community flood plans should encourage/assist personal flood plans
- Hurst Park has residents' association

#### **Emergency contacts**

- List of emergency contacts
- People who control utilities information on stopping water, electric etc.
- Contacts emergency services
- How to make contact if lose power
- How to get help
- Family contact details of residents and second contact points
- Lead contact in community with telephone numbers
- Boat owners don't have anyone to call on

#### Hospitals

- Location of hospitals
- Hospitals dealt with at borough level plan

#### Number of properties

- Number of houses could be 1000 in a community
- Very different experience depending on number of properties in community
- What is an appropriate size for flood plan (in terms of number of properties)?
  - Might need to break down plan into sub-groups in larger communities

#### Boat knowledge

- Boats (private and residential), how to prevent damage and gain access to them in a flood to secure them.
  - Would require a very specific flood plan to cover these issues.
- How to deal with boats, how to moor boats and controlling loose boats during a flood
- How could boats be moved? Towed by Environment Agency?

#### Warning system

- Warning how would this be distributed (phone, email, siren)? The system of warning needs to be well communicated to all.
- Where to look for warning information/forecasting.
- Community wide update methods (e.g. Twitter, Facebook, email)
- Recommended websites to look for warning and forecasts.
- Hotline to flood warning/information



#### Local flood risk information

- What are risks/impacts of flood and look to address each (e.g. sewerage, power loss etc.)
  - Are these things covered in Environment Agency template?
- Local hazards
- Map individual property level
  - Showing where first and serious flooding will occur
- Information on likely flood levels in area
- Where are man holes etc. delegated person to mark them out

#### Temporary defences

- Locations to put temporary barriers
- Trigger criteria
- When to implement/trigger property and community defences.

#### River information

- Don't know where edge of river is
- Especially when reliant on boats
- Pole/gauge board marker near bank/slipway
- Location and depth

#### Crime

- Mark when people have gone but risk of people stealing if they know they aren't around – this happened in 2014
- Keeping an eye on houses if planning to stay

#### Insurance

Insurance (Flood RE)

#### Bottom-up approach, top down

– Bottom-up approach, top down – where does it meet?

#### Everything said in question 1 and 2

Everything said in question 1 and 2

# 6.4 What support would you like to help develop a plan?

#### Group 1, Group 2, Group 3, Group 4, Group 5, Group 6

#### **Templates**

- Templates
- Help where River Ash Estate get help template from Environment Agency
- Don't need much more than template
- The Environment Agency's template.
- May be different versions of templates these should be available so people can pick what is useful to them
- Flood plan template well developed

#### Flood plan examples

- Examples of others
- Hear from another group on how their plan helped them
- What other communities/people have done (examples to work with)
  - Where would one get them from?
  - > Template would be useful
- Use of previous flood plans to use to help when writing a plan use ideas
- Advice from a 'buddy' in a different community who already has a flood plan
- Education to raise awareness/knowledge of what is being done elsewhere (e.g. roadshows by Environment Agency)

#### Clarity around plan responsibility

- Clarity around who plan is shared with is there an upward cascade?
- Council should have plan
- Are council in charge of 'plan'? Need clarity around plans



- Need to ring council and find out what plans/resources are already in place

#### Plan development engagement

- Contact details of organisations to help develop plan.
- Involving police 'safer neighbourhood' team and how to contact to provide flood plan input
- Who to invite to community meetings when developing plan
- Identification that the community plans need to connect
- Community itself needs to support the plan buy-in
- Assistance and support from Environment Agency and Local Authority
- What additional help is available? Where could support come from?

#### Updating plan

- Helped to develop and sustain a plan difficult to keep plan up to date
- Test flood plan. Practice exercise
- An annual reminder to update plan and share it
- Someone who stimulates and encourages others
- Gaps between plans need to be covered

#### Community information

- How do you define a 'community'?
- Publicity or effort from Environment Agency to identify the groups of communities
- People who aren't part of a community
- Information on effect of access/area, not just properties
- Basic data and where to get it from
  - Property heights
  - Water levels
  - Forecast levels
  - List of contact details of organisations (RNLI, emergency services)
- List of neighbours and updates.
- Need to know where elderly or disabled people live can council give this information or is it confidential?
- If people move either contact owner or warden

#### Insurance information

- Advice about insurance companies who provide good insurance for flooding
- Could Environment Agency facilitate discussion with local insurers if CFP helps with premiums? Is there an impact?

#### Work with resilience officer

- Work with local resilience officer is much easier.
- Can get local contacts from local community resilience officer (Environment Agency)
- Who are the Environment Agency Community Resilience Advisors? How do we contact them?
- Someone with good knowledge of resources available to write into plan e.g. community resilience advisors advice

#### **Sharing information**

- Centralised area to view other's flood plans for ideas or shared ideas (e.g. upload to web, possibly hosted on Environment Agency website)
- Potential confidentiality issues with some details contained within.
- Online forum for at risk communities to ask questions or share ideas
- Existing forums could be used (e.g. Mumsnet)
- Establish a closed Facebook group advantage that keeps all previous discussion.
  - More powerful tool than website?
- People more likely to contribute if you have a closed group.
- Central website information to share information/advice
- FAQ page
- Hard copy information (electricity cut off during flood)

#### **Emergency services**

- Do each emergency responders know what they have to do?
- Local emergency services contact with them to discuss access etc.



Need people to come around in boats with food and dry blankets

#### Maps

- Local area mapping for community to record defences or flooded areas onto.
- Flood maps showing flood levels as contours (like ordnance survey topographical) so can identify access routes etc.

#### Support available

- What support are groups entitled to? (E.g. from statutory duties of organisations)
- Sources of financial support

#### Flooding information

- Mechanisms of flooding (groundwater/surface water)
- Blockages can be caused by debris

#### **Transport**

Transport – flooding under railways.

#### **Publicity**

Publicity (ahead of issues occurring)

## 6.5 Response Form (Number each response)

# 6.5.1 Are you interested in being in a community flood resilience group to help work on a flood plan for your community?

#	Yes	No	Commont	
-	162	1	Comment  No. but I know a man who is: Elmbridge Clir Tany Danham	
1	1	J	No, but I know a man who is: Elmbridge Cllr Tony Popham	
2	1	- 1		
3		1	We are not a flood risk area	
4		1	In place	
5	1		(Donald Bell – Teddington Society)	
6	1		(Brian Holder - Teddington Society)	
7	1		(Jill Sanders – Friends of Hurst Park)	
8	1		(John Perry – Twickenham Society)	
9	1		Amanda Boot (Park road residents)	
10		1	Ham & Petersham is largely flood risk free	
11		1		
12		1		
13		1		
14	1		(Alan Mawdsley, Holmesdale Meadow Ltd.)	
15		1		
16	1		(Celia Holman, Eel Pie Island)	
17		1		
18	1		(John Legate, Kingston Environment Forum)	
19	1		(Liz James, Trowlock Island)	
20	1		Already am (Richard Endersby, River Ash Residents' Association)	
21	1		(Richard Mobbs, CARA)	
22	1		(John Sillwood, Weybridge Vandals)	
23	1		(John Meyer, National Trust)	
24		1	We have one and I support it (John Bazalgette, Trowlock Island)	
25	1		(Geraldine Locke, LBRUT councillor)	
26	1		(Nigel Randall, Thames Ditton Island)	

# 6.5.2 Can you be a conduit for two-way flow of information to and from different groups and interests and if so which?

#	Yes	No	Comment	
1	1		Molesey Residents' Association and Hurst Park Residents' Association	
2	1			
3			N/A	
4	1		Wheatleys eyot residents and LOSRA (Lower Sunbury Residents'	



			I	
			Association)	
5	1		With Mr Holder (Teddington Society)	
6	1		I have an email list of a variety of residents and groups	
7	1		(Jill Sanders – Friends of Hurst Park)	
8	1		(John Perry – Twickenham Society)	
9	1		Wheatleys Eyot	
10		1		
11	1		Yes, within reasonable limits – rowing users Sunbury to Teddington (John White, Kingston Regatta and Kingston Rowing Club)	
12	1		Yes but also in coordination with the appropriate Elmbridge Officer and	
			other councillors (Graham Woolgar, Elmbridge BC)	
13	1		(lan Crump, Thames Water)	
14	1		Already have contact with Trowlock Island	
15	1		Yes, with Ash Island residents mostly (Suleman Akhtar)	
16	1		Eel Pie Island Association (EPIA) and Twickenham Riverside Trust (TRT)	
17	1		Ajax Sea Scouts and Thames Ditton and Weston Green Residents'	
			Association	
18		1	My computer skills are not that great so would limit me	
19	1		(Liz James)	
20	1		Between River Ash Residents' Association (RARA) and outside groups	
21	1		Groups within CARA	
22	1		(John Sillwood)	
23	1		As a landowner in the area, can work with tenants and other organisations	
24		1	We have a flood resilience community group and I support it (John	
			Bazalgette, Trowlock Island)	
25	1		Possibly (Geraldine Locke, LBRUT councillor)	
26			-	

# 6.5.3 Are you interested in being the community lead for a community flood resilience group?

#	Yes	No	Comment	
1		1	Refer to Elmbridge Cllr Tony Popham	
2		1		
3		1		
4	1		Neil Huntingford	
5		1		
6		1		
7	1		(Jill Sanders – Friends of Hurst Park)	
8	1		(John Perry – Twickenham Society)	
9	1			
10		1		
11		1		
12		1		
13		1		
14	1		(Alan Mawdsley)	
15		1		
16	1		(Celia Holman)	
17		1		
18	1	1	Ditto (regarding computer skills limiting me)	
19	1		(Liz James)	
20	1		Already am! (Richard Endersby)	
21	1		If this is appropriate (Richard Mobbs)	
22		1		
23		1		
24		1	Liz James (Trowlock Island) already leads us	
25	1		(Geraldine Locke, LBRUT councillor)	



26	1	(Nigel Randall, Thames Ditton Island)
20		(Nigor Randall, marries bittornisiana)

## 6.5.4 Are you registered for flood alerts and updates?

#	Yes	No	Comment
1		1	No
2	1		
3		1	Not to my knowledge
4	1		
5		1	
6		1	No but could be - brianholder99@aol.com
7	1		
8	1		
9	1		
10			-
11			I don't know
12		1	
13		1	
14	1		
15		1	
16		1	
17	1		
18	1		I think so
19	1		
20	1		
21	1		
22	1		
23		1	
24	1		
25	1		
26	1		

### 6.5.5 How would you like to be kept up to date?

#	Comment				
1	No, see Cllr Tony Popham				
2	Online/via email - email address is Christina_gore@hotmail.com				
3	N/A				
4	Email and meetings				
5	Email: Editor.Tidings@gmail.com				
6	Yes - <u>brianholder99@aol.com</u> (email address taken from above)				
7	Email, text, call				
8	Email ( <u>eanneraymond@yahoo.co.uk</u> ) or post (Palm Beach, Eel Pie Island, Twickenham)				
9	Email				
10	-				
11	Email alerts but not in excess				
12	Named as a council contact in flood plans within my constituency (Graham Woolgar)				
13	Email				
14	Email and website				
15	Email				
16	Email - <u>celia.holman@gmail.com</u>				
17	Yes (Andrew Roberts)				
18	Would a regular informative newsletter be possible. Would also remind me that I'm on				
	the warning alert list.				
19	Yes				
20	Email and meetings such as this event				
21	Email				
22	Email				
23	Via local ranger - email				



24	Yes
25	Email
26	Email and one-to-one

#### 6.5.6 Who else do we need to reach?

#	Comment			
1	Stay in touch via Molesey Residents' Association. Secretary is Elmbridge Cllr Mike Axton.			
2	Martyn Kingsford - Chair of Hampton Wick and Teddington PLG. He is interested in the			
aftermath of any flood in particular.				
3	I don't think there is anyone in Ham or Petersham who you need to reach in connection			
	with flood resilience plans.			
4	Not sure if other end of Wheatleys eyot (U/S) have a plan yet			
5	Brian Holder (also at this meeting) is chair of the Teddington Society flood group			
6	-			
7	Island residents			
8	-			
9	More residents in the area. Would be good to have a list of other groups			
10	-			
11	River Users Groups			
12	Elmbridge officer(s) and other councillors			
13	-			
14				
15	Three small freeholders on Ash Island who I do not represent (Suleman Akhtar)			
16	Duncan Calham, Chair EPIA (eelpie.association@gmail.com)			
17	?			
18	All of my neighbours! All in flood plains!			
19	All the islanders please – a presentation as soon as possible			
20	Catherine Casey (Contacts as per flood plan)			
21	-			
22	New secretary			
23				
24	The whole of Trowlock Island is covered.			
25	Other local councillors who didn't attend			
26	-			



## 7 Session 3: Enhancements

# 7.1 Look at the six maps: What do you think about what you see?

#### Group 2

Sunbury - existing & proposed features and potential opportunities

- 1 Enhance moorings here more rings and timber 'bumpers' on pilings.
- 2 Yes. Good idea.

Sunbury - other suggested

1 - Great idea.

Molesey - existing & proposed features and potential opportunities

- 1 Beach along Hurst Park for launching small boats as well as habitat improvement
  - o Is beach intended for human recreation? Or landing for small boats? Can be busy with river traffic near proposed beach.
- Salmon passage will this be accessible to the public? Quite an interesting & educational
  feature as part of a riverside walk. If there are a few of these they could form part of a
  wildlife interest along a nature trail.

Molesey - Other suggested

- Footbridge between Hurst Park & Garrick's Lawn - Great.

Teddington - Other suggested

- 1 Agree
- 2 Agree again with information to create
- 3 Agree
- 3 Yes, agree
- 4 Yes agree
- 5 Not sure what this means? Surely need 'natural' methods to reinforce the river bank?
  - o Agree with this [comment] 'concrete' sounds out of character.
- Cycle bridge across the Thames
  - o It's on CIL 123 list and on neighbourhood farm project list.
  - o Maybe RTS to contribute to funding this bridge?
  - o Bridge will increase //// opening up development opportunities in Ham.

Teddington - existing & proposed features and potential opportunities

- 1 Agree
- 2 Would be great to have further sharing of path between pedestrians & cyclists. At moment cyclists rule.
- 3 More moorings for boats for lock.
- 4 Support the eel pass
- 5 Agree with this.
- 6 Would be great to enhance information regarding fish pass much as they have at Pitlochry (Scotland)
- 7 Agree
- 8 Caveat box yes! Yes!
- Cycle routes from Ham Richmond reeds improving surface of path and 'bat friendly' lighting along the towpath.
- Although not part of this plan there is real need for further residential mooring provision
- What would the impact of Ham Hydro be?

Group 2 – Sunbury – existing & proposed features and potential opportunities







Group 2 - Molesey - existing & proposed features and potential opportunities





Group 2 – Teddington – Other Suggested



Group 2 – Teddington – existing & proposed features and potential opportunities





#### Group 3

Sunbury - Other opportunities

- In favour of crossing points cycle provision.
- To all could we include hydroelectric power / to all of the weirs? (Generate electricity)

Sunbury - existing & proposed features and potential opportunities

– 1 – Is it possible to get an access route across weir?

Molesey - existing & proposed features and potential opportunities

- River bank naturalisation and the overhang (nesting birds), keep some hard landscaping for navigation purposes (moorings).
- Surface of towpath is worn (widespread including Graburn way to Molesey)
  - o This is a major cycle route. Refurbishment / upgrade of surface.
- 1 cycle route well below current design standards.
- 2 Slipway would lead to parking areas trailers, fast boats this is a concern expressed at a public meeting. (Could be restricted for small boats?)

Molesey – other suggested

- 1 In favour of this crossing.
- 2 Sailing reach so bridge would need to allow head clearance. Also regatta held here (Hampton Sailing Club).
- Can we include hydro power generation at all weirs?
- 3 This would improve accessibility, if possible, with cycle access.

Teddington - existing & proposed features and potential opportunities

- 6 Nice where it's eroded point of natural interest & variety along the corridor (not a problem, views it at a point of variation)
- Can we include hydro-power generation at all weirs?
- 3 Support this Environment Agency as just hawthorn hedge here at present.
- 4 Needs careful thought as this is a nature reserve
- 5 Would need to be designed in consultation with neighbours (Surbiton High School, Tamesis Sailing Club, Teddington School, Environment Agency Scouts & residents bordering recreation ground).

Teddington – other suggested

- 1 would improve the appearance currently very unattractive
- Are there any improvements / enhancements from the Teddington Studios development



(Richmond Council - Liaise with them)?

Group 3 – Sunbury – existing & proposed features and potential opportunities



Group 3 - Molesey - existing & proposed features and potential opportunities





Group 3 - Molesey - other suggested







Group 3 - Teddington – Other opportunities





#### Group 4

Sunbury - existing & proposed features and potential opportunities

- Prefer look of proposed map to other suggested
- 1 Will the development of a sports club here effect flooding?
- 2 Salmon storage / fishery needs tidying up currently neglected.
- 3 Fish Pass poorly maintained.

#### Sunbury – other suggestions

- 1 Absolutely against hydro-electric scheme
- 2 How will this work? Many major accidents of canoeists going through gate. When gates are open, only extreme kayakers will go through - who will take responsibility of this?
- 1 Noise pollution

#### Molesey - existing & proposed features and potential opportunities

- 1 Great for diversity well done Environment Agency for being proactive
- 2 Positive makes it harder for anglers to cast off from the weir
- 2 Negative Makes it more attractive to anglers in the rain.

#### Molesey - other suggested

- 1 Would like Environment Agency to endorse hydro schemes (on all weirs)
- 2 Environment Agency should protect their land and stop trees being cut down.
- 3 It's been on the schedule for 40 years but has still not happened.

#### Teddington - existing & proposed features and potential opportunities

- 1 surprising proposal currently a wall with railings to turn into a beach is a very odd idea sounds like somebody's pet project
- 2 Danger that cycle path (proposed) becomes a race track, pushing out pedestrians.
- 3 Both would be very positive for the environment
- 4 As long as eels can still use it.

#### Teddington - Other suggested

- 1 Teddington Studios no longer exists it's now housing / flats, with underground car park.
   (in progress of being built)
- 2 Would like more clarification on what this is.
- 3 Excellent project and can be combined with improved cycle path.
- 4. Not happy about Ham hydro.

#### Group 4 – Sunbury – existing & proposed features and potential opportunities





Group 4 – Sunbury – Other suggested



Group 4 - Molesey - existing & proposed features and potential opportunities





Group 4 - Molesey - Other suggested



Group 4 – Teddington – existing & proposed features and potential opportunities





Group 4 – Teddington – Other suggested





#### **Group 5**

Sunbury – existing & proposed features and potential opportunities

- Seems reasonable
- 1 Footbridge needed across new channel if created across island
- 2. Middle Thames Yacht Club should be consulted
- Area will be popular for anglers.

#### Sunbury - other suggested

 Consider adding to the number of day mooring and overnight moorings – applicable to all weirs – new ones at Windsor is a good example.

Molesey – existing & proposed features and potential opportunities

- Next to Hampton Court potentially high footfall.
- 1 Beach etc. / riverside leisure area would be well located
- Good to extend the canopy on the existing weir but don't put it in place where none there currently.

#### Molesey - other suggested

- Bridge from Hurst Park to Hampton would be a useful asset would transform experience of people locally
  - o But bridges can be very big engineered structures.
- Improve lighting around weirs along towpaths but needs to be sensitive to bats etc.

#### Teddington - existing & proposed features and potential opportunities

- 1 Preferred location of weir will get resistance from boat owners & anglers preference is to have it at existing overspill weir.
- 2 Yes please
- 3 Yes please path can be very dark currently.
- 4 Lighting around Teddington lock would be nice.
- 5 Yes sounds nice
- 6 Anglers would need to get access
- Can we mitigate to improve anglers environment?

#### Teddington – other suggested

 1 - Depends on choosing option to put sluices in middle of island, which anglers / boat owners would oppose.

Fotential to extend any pravel shoal further along the state of the and widtle.

Potential for a new channel to create habitat. Sor fish and widtle.

Potential for a new channel to create habitat. Sor fish and widtle.



Group 5 - Molesey - Other opportunities



Group 5 - Molesey - existing & proposed features and potential opportunities







Group 5 - Teddington – existing & proposed features and potential opportunities





#### Group 6

Sunbury – existing & proposed features and potential opportunities

- No comments.

Sunbury – other suggested

- 1 Public consulted location of bridge should be further south, and downstream. [Between flower pot green and Sunbury Lock Island]
- Bridges liked in general.
- Safety issue to do with road along the towpath.

Molesey – existing & proposed features and potential opportunities

- All locations:
  - o Flow dependent habitats may be difficult to create / maintain. Supports idea, but difficult to create.
  - o Could get more benefit from looking at operation of existing gates considering movement of gravel could move ,not convinced will stay.
  - o Consider effect of hydropower schemes etc. very difficult to figure out what will be affected.
  - o Need balance between best locations for fish passes and best option in terms of hydraulics.

Molesey – other suggested

- No comments.

Teddington – existing & proposed features and potential opportunities

- 1 Like cycle & pedestrian path would like bridge, good cycle route.
  - Need to consider access as it floods at high water needs to be raised or put culvert capacity beneath it.

Teddington – other suggested

 1 - Trees on Surrey back, upstream of lock have been chopped down to discourage illegal moorings.







Group 6 - Teddington – existing & proposed features and potential opportunities



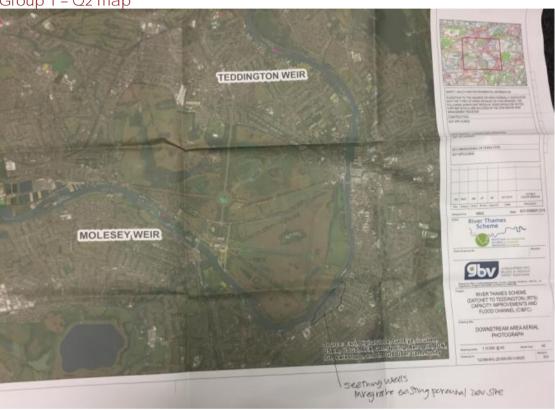
# 7.2 Based on everything you have heard, what other benefits would you like to see designed into the local flood solutions if feasible?

- Upgrading the towpath make less muddy and bat friendly (times / movement sensor) lighting.
- Bike accessible areas / path.
- Ways of making it compatible with pedestrians
- Surface maintainable bike friendly.
- Someone is looking out for the place.
- Plenty of bridges communities want more access over the river.
- Pinch points across existing bridge.
- Sometimes cycle path stops (houses) and nee to use roads
- More cautious riverside path open up for public access as part of planning policy or agree with land owner.
- Trying to discourage people from swimming near weirs / hanging off bridges. Things like more natural planting (thorns)
- Signs These parts are ok to swim in (consistency in marking / signposting) and other activities.
- Information / visitor information signposting
- Nature trail opportunity for tidying up / marking / land marks.
- Similar to beaches areas for different activities / safety.
- Thames Landscape Strategy have produced leaflets. Could be used to create boards.
- Café / trader decent provider so if doing a day out there is a place to stop.
- Facilities nappy changing / toilets.
  - o Kingston stretch (Kings Walk) as example)



- Habitat creation integration between people and nature e.g. St Georges Wharf / Hogsmill (in urban area)
- Locations for natural banks works. E.g. Desborough Island. Degraded habitat.
- Leisure / sport shallow part of the bank used for punting possible marked for more activity.
- More slipways with car parking & trailer access.
- Seething Wells location for habitat creation. Old Thames Water Reservoirs. Could be unlocked as part of the scheme to help raise funding.
  - o Previous planning application could have increased flood storage
- Kingston distance cycle lanes, interest in area. Kingston should talk to EA about potential.

Group 1 - Q2 map



#### Group 2

- Complete protection of existing floodplain designed into the flood plan i.e. Hurst Park (often lead to new/ interesting plant life).
- Consultation with neighbours & impact implications for / prior to installation of any flood barriers (temporary / permanent). i.e. temporary barriers proposed for mainland by Trowlock Island.
- If beaches made is it possible to encourage indigenous (marginal plants) therefore creates habitat variety.
- Viewing platforms (wooden jetty) different view of the river.
  - o Viewing points (mounds) with the spoils (Ham Lands?)
- Recent developments / operations for the 'Ferry'.
  - o Is it possible to put more support for resilience for the Hampton Ferry make his business more resilient?
- More boat moorings for residents (controlled)
- Designing the work at Ham Lands that is doesn't lose / preclude current walking use and enhances it as much as possible.
- Angling / fisheries enhancements for the interpretation boards (often left out).

- General Rough habitat for wildlife along the towpaths.
- 1 Ham Lands must be reinstated after rubble clearance (David Attenborough wants this / endorses this too).
- 2 Area reinstated to walking and wildlife area.



- General bat boxes put in areas where they will use them.
- Continue to monitor the lack of dredging along the river (Quoted from letter from Teresa May, 2010)
- General Stop burning woodland areas (which catches water).
- 3 Hampton Wick area cycle / footpath by the river.
- General concern light pollution across the river in residential & recreational areas affected birds & bats.
  - o Supports ways of reducing it (e.g. walkways without lights shining on river).

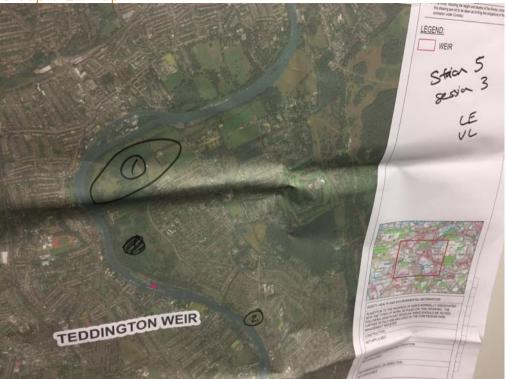
Group 3 - Q2 map



- 1 Ham Lands area being returned to how it used to be.
  - o Questions on how it would affect view but trees provide cover
  - Turns into swimming pool during flood used by wildlife good thing.
- 1 Opportunity for habitat creation
- Towpath upgrades (generic) continuing along Main River including lighting, mooring upgrades.
- 1 very well used.
- 1 Used extensively by cyclists
- 2 used by runners from Hawker Centre
- 1 Ham lands used by dog walkers may be impacted by channel.
- Assumption Teddington would be done first.
- 1 Not just block excavation would need to be attractive
  - o Opportunity for high quality landscaping
  - Get buy in from local communities
  - o Barnes wetland initial objection, now 300 volunteers and has increased house values win area.
- Weirs & locks weirs very attractive to people like to visit them.



Group 4 Q2 map



- Question about timetable of scheme in relation to weirs and channel
- Cycle route through Walton ends at Weybridge. XXXX to take XXX. Would be good to build a cycle bridge between Weybridge to north side.
- Wetland habitat creation at Ham Lands
- 1 South bank between Molesey & marker on map over-gown.
- 2 North bank at Kingston & Hampton Court heavily overgrown may reduce flow, makes it more difficult to steer when rowing. Conflict between habitat creation – cutting down bushes or may impede river flow
  - May be opportunity to remove some but replace with suitable habitat = habitat creation and less impact on flow.
- 3 Strong resident support for bridge.
- Weirs not cleared regularly should be cleared by end of summer.
  - o General clearance not just around the weirs.
- Social benefits flood defence works to improve / maintain access to the river and to / from boats.
- Recreation activities weirs where fish passes to be installed at these sites, passes to be combined fish / canoe passes.



## Group 5 - Q2 map





# 7.3 Ongoing communication and engagement

#### 7.3.1 How would you like to be kept informed?

Email	111111111111111111
Website	1111
Newsletter	111
Webcasts (e.g. Youtube)	1
Post-workshop report	1
Update meetings	1
Updates in local community magazines (e.g. Ham & Petersham	1
magazine)	
Via local flood warden	1
Via Community Resilience Advisor	1

# 7.3.2 If funding could be found, do you think another workshop would be helpful if so what would like it to cover?

Yes	No	Other comments	What would you like it to cover?
1		When events have developed to justify	As above (left)
1			River user requirement given more consideration.
	1		
1			Annual update and consultation on next stage.
1			How funding will be allocated and the time frames.
1			Update on timescales of RTS and more information on downstream.
1			Further development of model
1			Any significant updates, perhaps nearer planning application
1			In due course when new information to be imparted.
1		But not during working hours	
1			Update on progress and detail on overall scheme and individual projects
	1	I've found today informative but unless there is new information, I think others would benefit more than me.	As above (left) – new information, positive plans, next stage, location difficult to take in broad pictures.
1		But later	New data, new findings, progress, any issues arising.
	1		
1			New developments/direction, major progress
1			Cycle routes along and over river
1			More detailed survey and development of possible/proposed Ham Lands flood storage/conveyance
1			
	1		
	1		Local workshops could tackle local flood plans
1			Keeping us up to date
1			Trees
1			Update on what was discussed and proposed today on 17/11/16 about River Thames Scheme.

#### 7.3.3 How would you like to continue to be involved?

Environment Agency news updates via email / email prompt to check website	111111111
Website	1111
Mail	1
Attend next workshop/seminar	11111



Consultation and spreading of good practice	1
Kept up to date with any new plans etc.	1
Only real interest in weirs downstream of Shepperton is to ensure that the Scheme is effective	1
Via community resilience advisor (Justine Glynn, Tina Donaldson)	111
Through Ham & Petersham neighbourhood forum	1
Flood wardens at Trowlock Island (Liz James)	11
Discussion of matters of direct local impact	1
Receiving information as the model yields answers and solutions are involved	1



# 8 Parking Place

#### Modelling

- Will the existing designated floodplain be re-drawn in view of the new modelling?
- When will revised flood model outputs be released?
- Model output before or after Jubilee River?

#### Clear on level of protection

- Assumption that RTS would have solved much of 2014 flooding issues – but speaking to Simon Lewis, that's not the case – need to be clear on this.

#### Local authority

- Hasn't been much from Surrey CC seeing as we pay them council tax
- Using local authority progress on council tax/business tax for relief could be used to help check 2014 data in effect and establish which properties have been flooded.
- Ask council reps to stand up at start

#### Information

- Would like to see an organogram of the RTS team structure
- Need to mention leaflets and booklets (e.g. living on the edge, what to do before/after/during flood)
- Home owners guide to flood 2011
- Can individual property threshold levels be made available?
- Need to know flood level in AOD instead of red/blue (Jan 2014 floods and 1 in 100)

#### **Definitions**

- We need a better definition of resilience - ability to bounce back

#### Questions

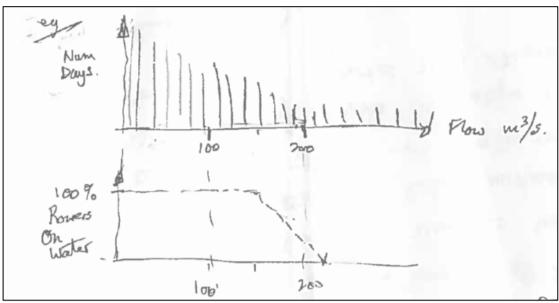
- Who determines who that community is; how is it recognised and organised before the community flood plan is determined?
- Why are the new builds/developments not required to have flood defence built in?
- Some of the questions have same answers.
- What constitutes a community? Who is going to pay for PLP? (Taken from Group 6's session 2a, question 2)
- What happened to flood wardens? (Taken from Group 6's session 2a, question 3)

#### People

- Consultation available. Friends of Hurst Park could be useful for this process. Local flood information (13).
- CEH Professor Michael Acreman can we include him please?

#### Boats

- Who at the EA should I contact about unlicensed boats?
- RNLI Consultation with the RNLI about river safety along the river banks training for par and relevant staff is done with RNLI expertise. Can this be extended to the river?
- Despite red flood boards it seems as though some people consider going out on the river. The wash created can be significant and may be enough to over-top flood boards. Can consultation be given to making it illegal for bigger craft to go out? This is in addition to the obvious safety concerns.
- Is the waste from illegally moored boats being addressed?
- I am concerned about the possible effect of the scheme on leisure and sport river users. To give an example of rowers, but canoeists are smaller.
  - o Training on the water takes place through the winter and occurs both during daylight and night (when boats use lights).
  - o Novices and juniors will go out when flow rates are perhaps up to 120 m<sup>3</sup>/S. Competent rowers will go out when rates are below perhaps 150-170 m<sup>3</sup>/S, i.e. when yellow boards are likely.
  - o Experts will go out up to perhaps 200-220 m<sup>3</sup>/S. Red boards are likely but crews and coaches make a risk assessment and decide accordingly.
  - No one goes out above that.



I discussed this with Rob Fraser and he assured me that the flood channels will not come into operation until flow rates exceed 200 m<sup>3</sup>/S, therefore the scheme will not affect the ability of sports people's ability to use the river between Sunbury and Teddington.

Please could you confirm this and present the graphs above for representative and extreme years and how it would be affected by the scheme. Thanks, John White (60)

#### Does this belong in questions?

- Rob Fraser said new gates will be operated slowly so no surge. EA during FRAG <Flood Risk Action Group> enquiry <made it> very clear that JR <Jubilee River> gates only open slowly demonstrated to the FRAG members and always insisted there was no surge. Is this a departure in message or was this a slip up?
- Impact of dredging/widening of Desborough channel concern over dredging: potential bank erosion: previously led to believe that dredging would not be effective, so surprised that this is now under consideration
- Widening of Desborough channel: likely to be more significant impact than weirs would have liked to have seen a <br/>before?> latter artists impression of this aspect. (37)



# Annex 1 Workshop Agenda

9:30		Getting Started: registration, coffee and tea will be available, starting activity:  Q Its 2030 and you are chatting with people about how much better things are now if a flood happens. Why what pleases you most?  Add your thoughts to those of others		
			Samina Khan/Nathan Fahy (Environment Agency)	
		Facilitator's introduction	Lucy Armitage (Dialogue Matters)	
		The RTS introduction  Possible flood solutions – what we've explored and what we've found out	Emma Booth (GBV)	
		What happens in a flood?	Rob Fraser (GBV)	
		Thames Barrier	Vicky Kettley (Thames Barrier) Sarah Campbell (TE2100)	
		Question & Answer session to clarify your understanding (there will also be additional time to give your views after the break)		
11:05	20	Tea and coffee break		
		Session 1: Sharing knowledge ('Activity Fête')		
		A. Consider the weir options  Look at the weir options as they have been finalised – tell us your thoughts		
		Q Do you think we should add canopies over the weirs? (Fill out docket to give us your views)		
		B. Information  Q What do you want to know?		
		Q What would give you confidence about the solutions we are exploring for downstream areas?		
	C.Local Flooding - tell us your 'on the ground' knowledge			
		Q What are the flooding issues?		
		Q What were the sources' of 2014 flooding in your property / locality (i.e. groundwater, sewer backing up, surface water, fluvial)?		
		Q Where are the flood issues? Please look at the flood experience?	maps – does this match your	
		<ul> <li>What do you agree with? What do you base the</li> <li>What do you question? What do you base that</li> </ul>		



	D. Mapping communities  O. What criteria should we use for identifying communities?					
		<ul><li>Q What criteria should we use for identifying communities?</li><li>Q Are there existing groups if so what are these and who are the group leaders/figure heads/go to people/key players?</li></ul>				
		Q What are the communities and what are the right groupings? Map where you think they are.				
		E. Flood Storage on the Ham Lands  Q What are the benefits of using this area?				
		Q What are the dis-benefits?				
		Q What do we need to know to consider this option in more depth?				
		Q What type of landscape design (land use) would t material has been excavated?	hey like for the area once			
		Q Flood storage at other locations – where else could	d be considered?			
2:40	40	LUNCH				
		Session 2: Community Resilience Measures				
		What has already happened?				
		What we are planning to do?	Malcolm Smith			
		How we will work with communities (to explore options for community resilience to flooding)?	(Environment Agency)			
		Preparing a Community Flood Plan	Richard Endersby, River Ash Residents' Association			
		Q What information would your community like to know as we approach this work?				
		Q What types of information will your community/intended help us progress and develop this work?	erest group be able to provide to			
		Q What do we need to factor in when considering th options (e.g. environmental and social factors, issu				
4:30	10	Short comfort break				
		Community flood plans  Q What are the benefits of having a flood plan?  Q What happens if we don't have a plan?  Q What would you like to be covered in the flood resilier  Q What support would you like to help develop a plan?	nce plan/s?			
		Response Form (questionnaire):  Q Are you interested in being in a community flood resiling flood plan for your community?  Q Can you be a conduit for two way flow of information	- '			
		<ul> <li>interests and if so which?</li> <li>Q Are you interested in being the community lead for a group?</li> <li>- Are you registered for flood alerts and updates?</li> <li>- How would you like to be kept up to date?</li> <li>- Who else do we need to reach?</li> </ul>	community flood resilience			
5:25	20	- who else do we need to reach?  Tea and coffee break				
J.ZJ		Session 3: Enhancements				
		Opportunities in the downstream area				
		Q What do you think about what you see?				



16:45	Finish no later than this
	Wrap up, thanks and next steps
	Short term actions (type up and get them outputs)
	Parking place
	Feedback form
	Finishing tasks
	<ul> <li>Q How would you like to be kept informed?</li> <li>Q If funding could be found, do you think another workshop would be helpful if so, what would you like it to cover?</li> <li>Q How would you like to continue to be involved?</li> </ul>
	Ongoing Communication and Engagement (questionnaire)
	<ul><li>Recreation activities?</li><li>Social benefits?</li><li>Features for nature and wildlife?</li></ul>
	Q Based on everything you have heard what other benefits would you like to see designed into the downstream flood solutions if feasible? (weir maps plus a large map of the surrounding downstream area/whole scheme)



# Annex 2 List of Attendees

	Name	Organisation
1.	Suleman Akhtar	TW Allen & Son (Yachts) Ltd.
2.	Andy Batchelor	Thames Barrier
3.	John Bazalgette	Trowlock Island Residents
4.	Chris Begley	Kingston Borough Council
5.	Donald Bell	Teddington Society
6.	Amanda Boot	Parke Road Residents Assn
7.	Emma Booth	GBV
8.	Paul Chadwick	London Borough of Richmond
9.	lan Crump	Thames Water
10.	Paula Day	River Thames Society
11.	Jason Debney	Thames Landscape Strategy
12.	Tina Donaldson	Environment Agency
13.	Kevin East	British Canoeing
14.	Richard Endersby	River Ash Residents' Association
15.	Nathan Fahy	Environment Agency
16.	Justine Glynn	Environment Agency
17.	Christina Gore	Hampton Wick & Teddington PLG
18.	Brian Holder	Teddington Society Flood Working Group
19.	Celia Holman	Eel Pie Island residents
20.	Neil Huntingford	Wheatleys Eyot residents
21.	Liz James	Trowlock Island representative
22.	Samina Khan	Environment Agency
23.	David Lamb	Ham & Petersham Neighbourhood Forum
24.	John Legate	Kingston Environment Forum
25.	Vivienne Leighton	Spelthorne Borough Councillor and River Thames Alliance
26.	Ian Maguire	Runnymede Borough Council
27.	Ernest Mallett	West Molesey Surrey County Councillor
28.	Alan Mawdsley	Holmesdale Meadow Ltd. (Teddington)
29.	Miles Macleod	Portmore Park Residents' Association
30.	Tim McGrath	Wildfowl and Wetlands Trust
31.	Jack Meyer	National Trust
	Richard Mobbs	CARA (Canbury and Riverside Association)
32.		



34.	John Perry	Eel Pie Island representative
35.	Mark Rachwal	Spelthorne Borough Council
36.	Nigel Randall	Thames Ditton Island representative
37.	Andrew Roberts	Thames Ditton & Weston Green Residents' Assn
38.	Chris Ruse	Ham United Group
39.	Jill Sanders	Friends of Hurst Park
40.	Jennie Shapter	Walton Lane / Weybridge representative
41.	Michael Shefras	River Thames Alliance
42.	John Sillwood	Weybridge Vandals Sports Club
43.	Ben Skipp	Surrey County Council
44.	Malcolm Smith	Environment Agency
45.	Paul St. Pierre	Environment Agency
46.	Dickon Wells	Environment Agency
47.	John White	Kingston Rowing Club
48.	Graham Woolgar	Elmbridge Borough Councillor
49.	Geraldine Locke	Richmond Council (Hampton Wick)
50.	Rob Fraser	GBV
51.	Simon Lewis	Environment Agency
52.	John Douglass	Lower Ash Estate residents