News story: Environmental impact assessment June 2017: River Thames Scheme

Introduction

The River Thames between Datchet and Teddington has the largest area of undefended, developed floodplain in England. Over 15,000 homes and businesses within the area are at risk from flooding.

The River Thames Scheme will reduce the risk of flooding to homes, businesses and critical infrastructure (roads, sewerage network and power supplies).

We need a range of solutions to manage the risk of flooding in the River Thames Scheme area and so the scheme consists of:

- construction of 17 kilometres of new flood channel built in 3 sections
- capacity improvements to the weirs at Sunbury, Molesey and Teddington
- community resilience measures
- major incident planning
- habitat creation.

Environmental impact assessment

The Environmental Impact Assessment (EIA) establishes how things are now (the environmental baseline) and assesses the impacts that the scheme is likely to have on this.

It will consider all the likely significant impacts that could result from the scheme and will look at ways to avoid or minimise these impacts, as well as ways to improve the local environment.

The EIA will be documented in an Environmental Statement, which will be submitted with the planning application to inform the planning decision.

We will capture all the ways to avoid or minimise impacts in an Environmental Action Plan, which will be implemented throughout the construction phase of the project.

Environmental Statement

The first stage of producing an Environmental Statement is to develop an Environmental Scoping Report which will be presented to external consultees for comment in the summer.

The Scoping Report provides a summary of the existing environment, considers how the environment could be effected by the Scheme and whether these effects

are likely to be significant. Such considerations include landscape, cultural heritage, ecology, noise, water environment and human beings.

Scoping opinion

The scoping report is submitted to the Local Authorities as part of the planning process, who will be asked to provide a scoping opinion under the Town and County Planning (Environmental Impact Assessment) Regulations. They will consider if we have included all the likely significant impacts that could result from the scheme, which will set the scope of the Environmental Impact Assessment.

They are likely to consult with other organisations and government departments in order to form this opinion. This is not a formal public consultation at this stage and comments are not requested from members of the public. Comments from the public will be captured during the planning application process in 2018.

Environmental and Ecological Surveys

As part of our work to manage our environmental impact we are carrying out further ecological and environmental surveys this year. A range of species will be targeted in these surveys, including bats (and their roosts), water voles, breeding birds, otter, great crested newts and species of reptiles.

Archaeological surveys are planned to commence in summer 2017, and will involve metal detecting, radar surveys and borehole sampling. The results of these surveys will help us identify targeted locations for trial trenches, in late 2017, to evaluate archaeology.

If you would like more information about the surveys we are conducting please visit our website

Environment Agency June 2017

News story: Community resilience measures June 2017: River Thames Scheme

Introduction

The River Thames between Datchet and Teddington has the largest area of undefended floodplain in England. Over 15,000 homes and businesses within the area are at risk from flooding.

The River Thames Scheme will reduce the risk of flooding to homes, businesses and critical infrastructure (roads, sewerage network, and power supplies).

We need a range of solutions to manage the risk of flooding in the River Thames Scheme area and so the scheme consists of:

- construction of 17 kilometres of new flood channel built in 3 sections
- capacity improvements to weirs at Sunbury, Molesey and Teddington
- community resilience measures
- major incident planning
- habitat creation

Community Resilience Measures (CRM)

We are progressing initial assessments for Community Resilience Measures across the scheme area. This involves analysing data from flood modelling and surveys to look for areas that could benefit from more localised permanent, temporary or property level solutions.

Types of CRM may include permanent flood defences in the form of flood walls or embankments, temporary flood defences that can be deployed in advance of a flood or property level flood intervention consisting of flood doors and barriers.

Initial assessments

The first stage is to group properties together based on the modelling and survey data into areas that could benefit from CRM. The next stage is to identify what type of measure could be used. This is done by engineers based on the location of the properties, the physical and environmental constraints in the area, the flood modelling, past experience and by looking at the costs and benefits for each option.

Appraisal

Once we have completed initial assessments we will identify areas that can be taken forward for more detailed appraisal and consultation with communities to select a preferred solution.

CRM will not be suitable for all communities and properties. Our assessments will identify those measures that can be taken forward based on how much they cost and the benefit they provide along with engineering decisions.

Those CRMs taken forward for implementation will qualify for partial central government funding. The remaining funding is expected to be provided from partnership contributions as part of the wider River Thames Scheme.

Property level programme

You may also be aware of our Property Level Programme (PLP) which has installed flood protection measures to hundreds of properties within the Lower Thames Area. The PLP programme is now closed with works to the last few

remaining properties soon to be completed.

Next Steps

Most of the data we need is collected from an office however you may see RTS representatives visiting areas to understand the location better. We will also be using local knowledge of previous flooding to better understand how we can help.

We understand you will want to know how you will be affected and we would like to talk to communities later in the year once we have reviewed the data from our initial assessments.

In the meantime we will keep you updated on the progress of our assessments and let you know how and when you can get involved via our <u>River Thames</u>
Scheme newsletter

News story: Community resilience measures June 2017: River Thames Scheme

Introduction

The River Thames between Datchet and Teddington has the largest area of undefended floodplain in England. Over 15,000 homes and businesses within the area are at risk from flooding.

The River Thames Scheme will reduce the risk of flooding to homes, businesses and critical infrastructure (roads, sewerage network, and power supplies).

We need a range of solutions to manage the risk of flooding in the River Thames Scheme area and so the scheme consists of:

- construction of 17 kilometres of new flood channel built in 3 sections
- capacity improvements to weirs at Sunbury, Molesey and Teddington
- community resilience measures
- major incident planning
- habitat creation

We are progressing initial assessments for Community Resilience Measures across the scheme area. This involves analysing data from flood modelling and surveys to look for areas that could benefit from more localised permanent, temporary or property level solutions.

Types of CRM may include permanent flood defences in the form of flood walls

or embankments, temporary flood defences that can be deployed in advance of a flood or property level flood intervention consisting of flood doors and barriers.

Initial assessments

The first stage is to group properties together based on the modelling and survey data into areas that could benefit from CRM. The next stage is to identify what type of measure could be used. This is done by engineers based on the location of the properties, the physical and environmental constraints in the area, the flood modelling, past experience and by looking at the costs and benefits for each option.

Appraisal

Once we have completed initial assessments we will identify areas that can be taken forward for more detailed appraisal and consultation with communities to select a preferred solution.

CRM will not be suitable for all communities and properties. Our assessments will identify those measures that can be taken forward based on how much they cost and the benefit they provide along with engineering decisions.

Those CRMs taken forward for implementation will qualify for partial central government funding. The remaining funding is expected to be provided from partnership contributions as part of the wider River Thames Scheme.

Property level programme

You may also be aware of our Property Level Programme (PLP) which has installed flood protection measures to hundreds of properties within the Lower Thames Area. The PLP programme is now closed with works to the last few remaining properties soon to be completed.

Next Steps

Most of the data we need is collected from an office however you may see RTS representatives visiting areas to understand the location better. We will also be using local knowledge of previous flooding to better understand how we can help.

We understand you will want to know how you will be affected and we would like to talk to communities later in the year once we have reviewed the data from our initial assessments.

In the meantime we will keep you updated on the progress of our assessments and let you know how and when you can get involved via our <u>River Thames</u>
<u>Scheme newsletter</u>

News story: Archaeology surveys June 2017: River Thames Scheme

Archaeological surveys will start in June 2017 and are expected to finish at the end of the year. They will take place in areas of Chertsey Abbey Meads, Kingsmead Quarry, Thorpe Hay Meadow, Desborough, Datchet, and Shepperton.

We use different survey techniques in different areas to give us a wide range of data. This gives us a better understanding of what is likely to be in the ground. We use this information to plan the construction of the River Thames scheme.

The results of these surveys will help us identify targeted locations for trial trenches, in late 2017, to evaluate the archaeology.

Geophysical Surveys

Different materials below the ground can cause local disturbances in the Earth's magnetic field that are detectable with sensitive equipment. Archaeologists use hand held devices or small hand pulled carts to establish the presence of buried archaeological remains and the potential of the study area.

Earthworks Surveys

Help identify the presence of archaeologically significant earthworks or landscape features. Archaeologists look at the areas and compare what they see with historical maps and aerial photographs.

Borehole Surveys

Archaeologists dig boreholes and hand auger pits to record the composition of the ground. This information enables archaeologists to draw conclusions about how and when the area may have been used. The boreholes are excavated using specialist construction equipment.

Electrical Resistivity

Tomography Surveys Archaeologists insert magnetic probes into the ground to gather more data about the composition of the ground to support the information recorded by the borehole surveys.

Metal Detecting Surveys

Archaeologists use high performance metal detectors to detect different types of metals in the ground. This information is used to identify areas that could contain archaeological remains.

Field Walking Surveys

Archaeologists walk along marked out areas looking at the land for features to identify areas that could contain archaeological remains.

All works are carried out under the supervision of either our consultant engineers or a member of Environment Agency staff, in accordance with an agreed method statement.

If you would like more information about the River Thames Scheme please visit our website

Environment Agency June 2017

News story: Archaeology surveys June 2017: River Thames Scheme

Archaeological surveys will start in June 2017 and are expected to finish at the end of the year. They will take place in areas of Chertsey Abbey Meads, Kingsmead Quarry, Thorpe Hay Meadow, Desborough, Datchet, and Shepperton.

We use different survey techniques in different areas to give us a wide range of data. This gives us a better understanding of what is likely to be in the ground. We use this information to plan the construction of the River Thames scheme.

The results of these surveys will help us identify targeted locations for trial trenches, in late 2017, to evaluate the archaeology.

Geophysical Surveys

Different materials below the ground can cause local disturbances in the Earth's magnetic field that are detectable with sensitive equipment. Archaeologists use hand held devices or small hand pulled carts to establish the presence of buried archaeological remains and the potential of the study area.

Earthworks Surveys

Help identify the presence of archaeologically significant earthworks or landscape features. Archaeologists look at the areas and compare what they see with historical maps and aerial photographs.

Borehole Surveys

Archaeologists dig boreholes and hand auger pits to record the composition of

the ground. This information enables archaeologists to draw conclusions about how and when the area may have been used. The boreholes are excavated using specialist construction equipment.

Electrical Resistivity

Tomography Surveys Archaeologists insert magnetic probes into the ground to gather more data about the composition of the ground to support the information recorded by the borehole surveys.

Metal Detecting Surveys

Archaeologists use high performance metal detectors to detect different types of metals in the ground. This information is used to identify areas that could contain archaeological remains.

Field Walking Surveys

Archaeologists walk along marked out areas looking at the land for features to identify areas that could contain archaeological remains.

All works are carried out under the supervision of either our consultant engineers or a member of Environment Agency staff, in accordance with an agreed method statement.

If you would like more information about the River Thames Scheme please visit our <u>website</u>

Environment Agency June 2017