

Outer Winchester Flood Alleviation

Welcome

Hampshire County Council, Winchester City Council, the Environment Agency, and the Parish Councils of Littleton, Kings Worthy and Headbourne Worthy have been working together to develop measures to reduce the risk of flooding in the local area. The drainage systems of the three areas are interlinked and an integrated approach will be required to determine appropriate measures to reduce flood risk

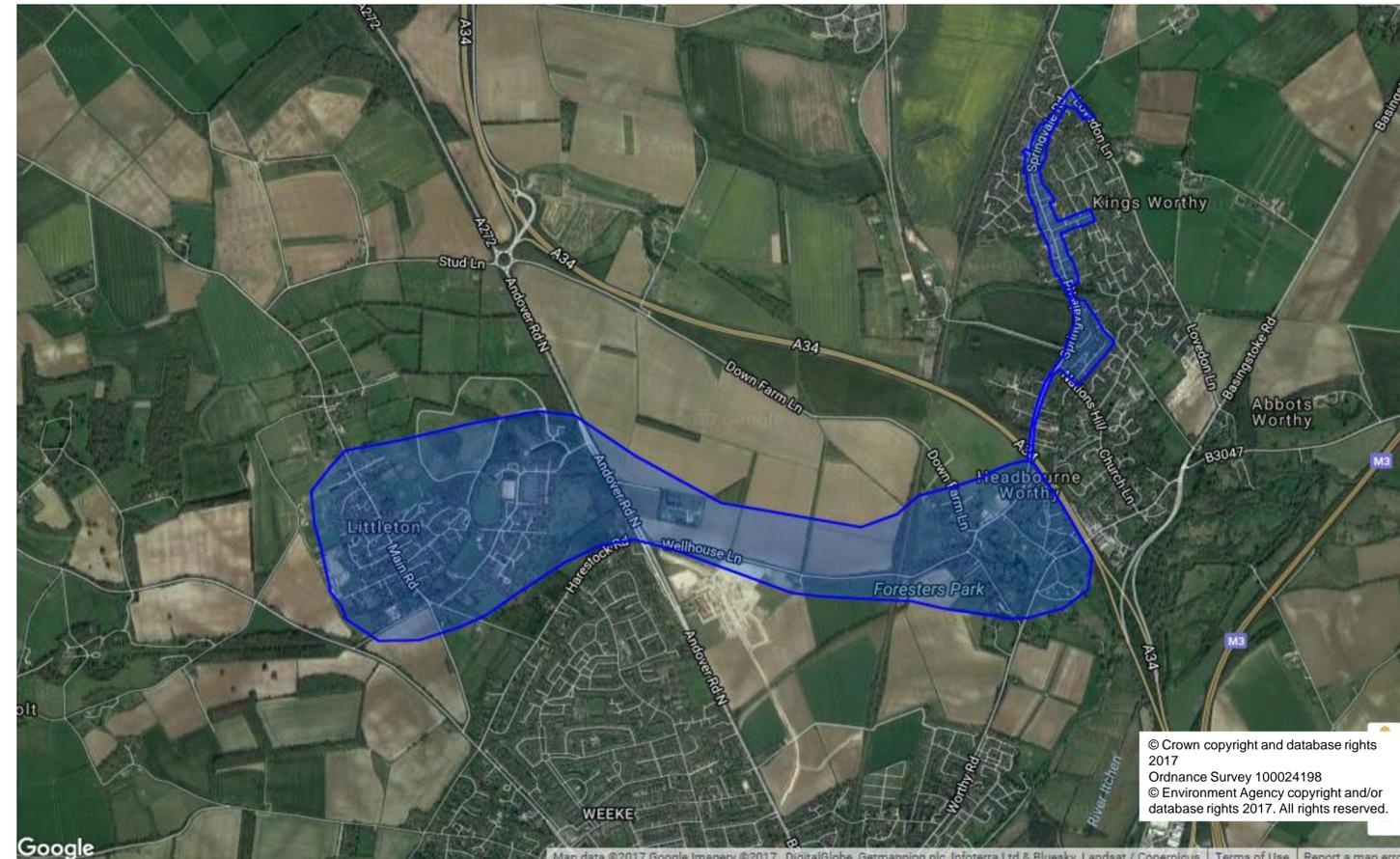
The key objectives are to:

- Reduce the risk of flooding in a weather event similar to that of 2013/2014 without increasing the risk of flooding elsewhere;
- Reduce the impacts of flooding on the communities, their properties, businesses and infrastructure; and
- Improve resilience to flooding

The purpose of this exhibition is to provide information about:

- What has been done so far?;
- What is happening now?;
- How you can help; and
- How you can keep up to date.

This shows the area covered by flood alerts and warnings for Groundwater flooding in Kings Worthy, Headbourne Worthy and Littleton.



We hope that you find the exhibition informative.

Please take a look at the boards. If you have any questions, please see a member of the project team who are on hand to help.

Please let us know if you have any information that will be useful for the development of the scheme.

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What has been done so far?

Following the flooding in 2013/14, a number of measures have been put in place to reduce flood risk. These include:

- Drainage improvements:
 - Installation of a new pipe by Pitter Close residents to channel flood water onto adjacent Defence Estates land;
 - Installation of new gullies in North Drive;
 - Installation of major new culvert beneath Andover Road North
- Clearance and improvements of highway drainage opposite the Good Life farm shop
- Investment in pumps by house owners and installation of Property Level Resilience measures in Littleton;
- Clearance and restoration of drainage at Springvale Road / Forbes Road by Hampshire Highways;
- Improved highways ditch clearance regime;

- Littleton, Headbourne Worthy and Kings Worthy Emergency Flood Plans;
- Appointment of Parish Lengthsman for Headbourne Worthy to help maintain lengths of road and local drainage;
- Environment Agency Flood Alert Service;
- Ongoing maintenance

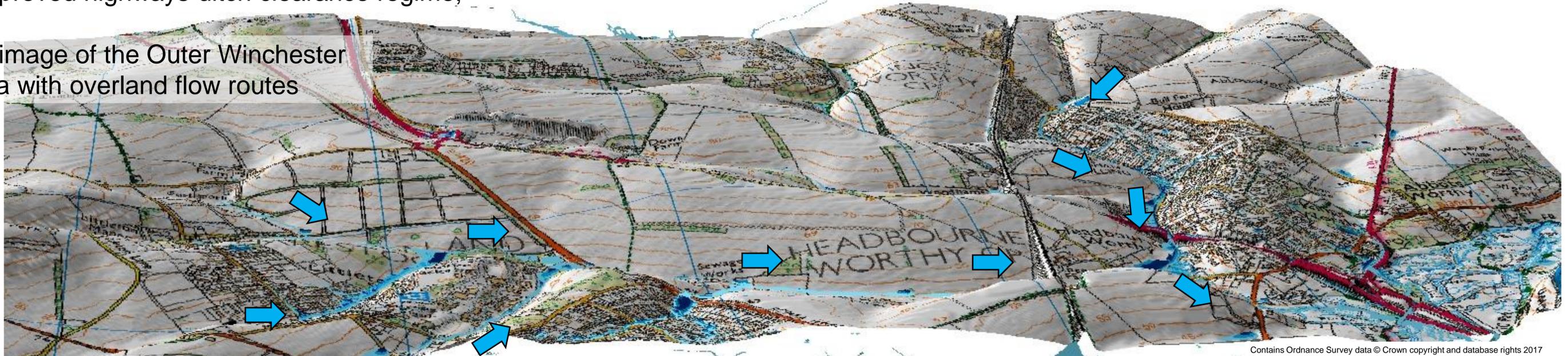
A number of assessments have also been undertaken to improve understanding of the extent and causes of the flooding, and to identify possible measures for reducing the risk of flooding.

In order to get a full picture of what caused the flooding in the area, we reviewed a number of studies undertaken by different authorities and information provided by the Parish Councils, the City Council, the Environment Agency and other local partners.

An initial assessment included:

- Evaluation of existing drainage
- Identification of key risks and issues
- Recommendations for next steps.

3D image of the Outer Winchester area with overland flow routes



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Initial Assessment – Key Findings

- The flooding was driven by groundwater rising as springs in Littleton, Headbourne Worthy and Kings Worthy and flowing towards Headbourne Worthy, and the River Itchen.
- In Littleton the primary issue was high groundwater levels which caused the drainage system, mainly soakaways to stop working.
- With soakaways unable to channel the rising groundwater away, it combined with rainwater and followed the natural topography on the surface.
- In Headbourne Worthy and Kings Worthy a lack of capacity within the existing pipes and ditches under high groundwater conditions led to overtopping and surface water flows as well as spring flows.
- Ongoing maintenance will be critical to ensure the optimum drainage capacity both now and in the future.
- The precautions that can be taken to protect against groundwater flooding are limited. Basement and cellar flooding will continue to flood unless property owners take the appropriate steps.



King Charles Pub, Kings Worthy



Pitter Close, Littleton

What are we doing now?

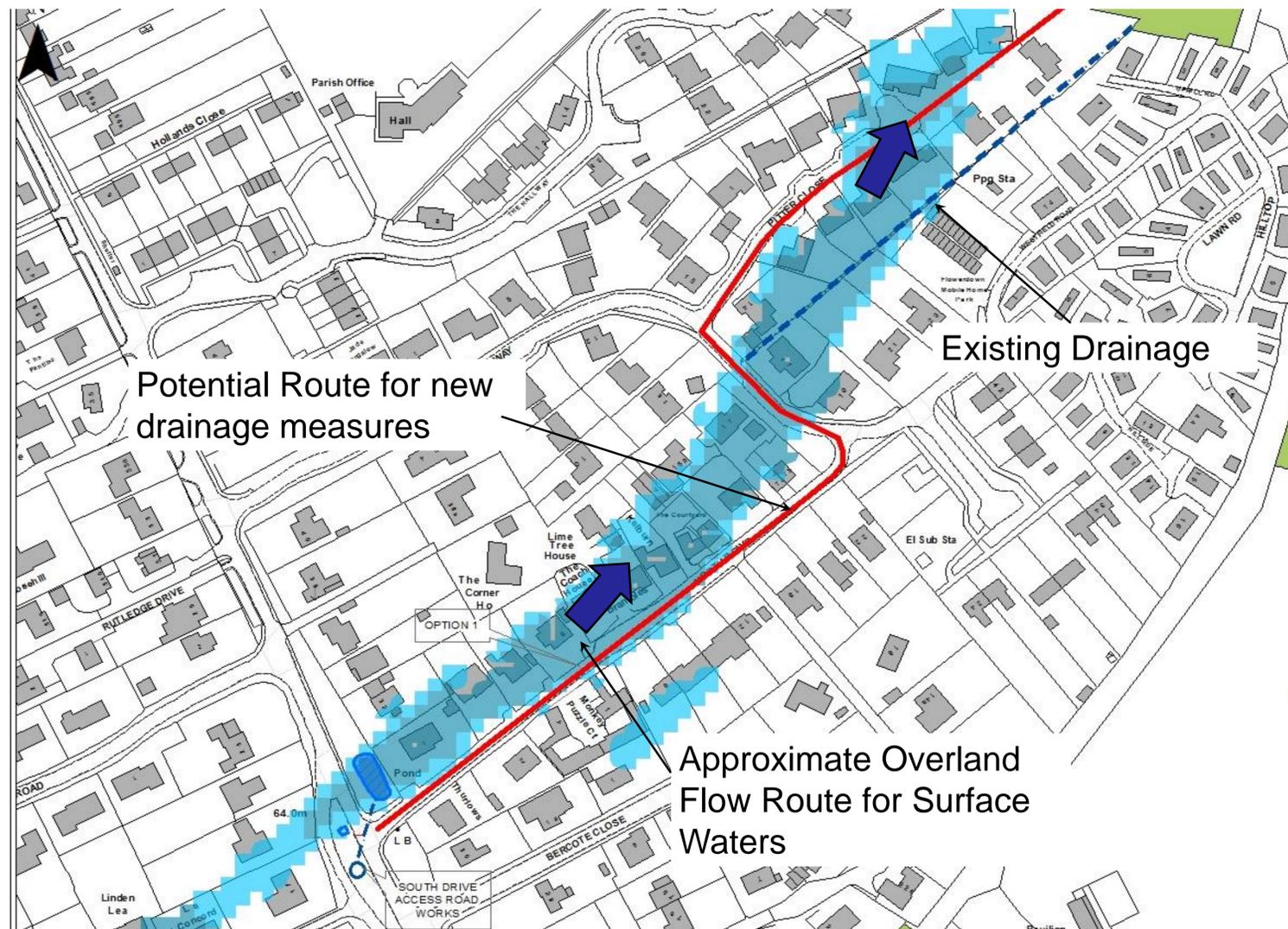
We are undertaking the next stage of design work to develop viable and affordable measures that will reduce the risk of flooding. This will include detailed site investigations, hydraulic and flood risk assessments to inform the design work.

Any measures identified can only be implemented if the required funding, approvals and consents can be acquired. This will continue to be explored as part of the next stage of works

The following plans summarise the findings and recommendations from the previous study and show the key areas where we are undertaking detailed assessment and investigations.

Outer Winchester Flood Alleviation

Littleton



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Findings

The initial proposals were to locate a new drain from the pond within North Drive to the discharge point onto DIO land in order to reduce water from the highway and away from vulnerable properties.

Recommendation

- Improve drainage capacity
- Options include provision of a new drainage pipe connecting with existing gullies and soakaways to pass water along North Drive to Pitter Close.
- Route currently shown is indicative and other routes and options will be considered based on a detailed hydraulic assessment.

Investigations / Assessment Required

An initial design has been undertaken and will be updated to include:

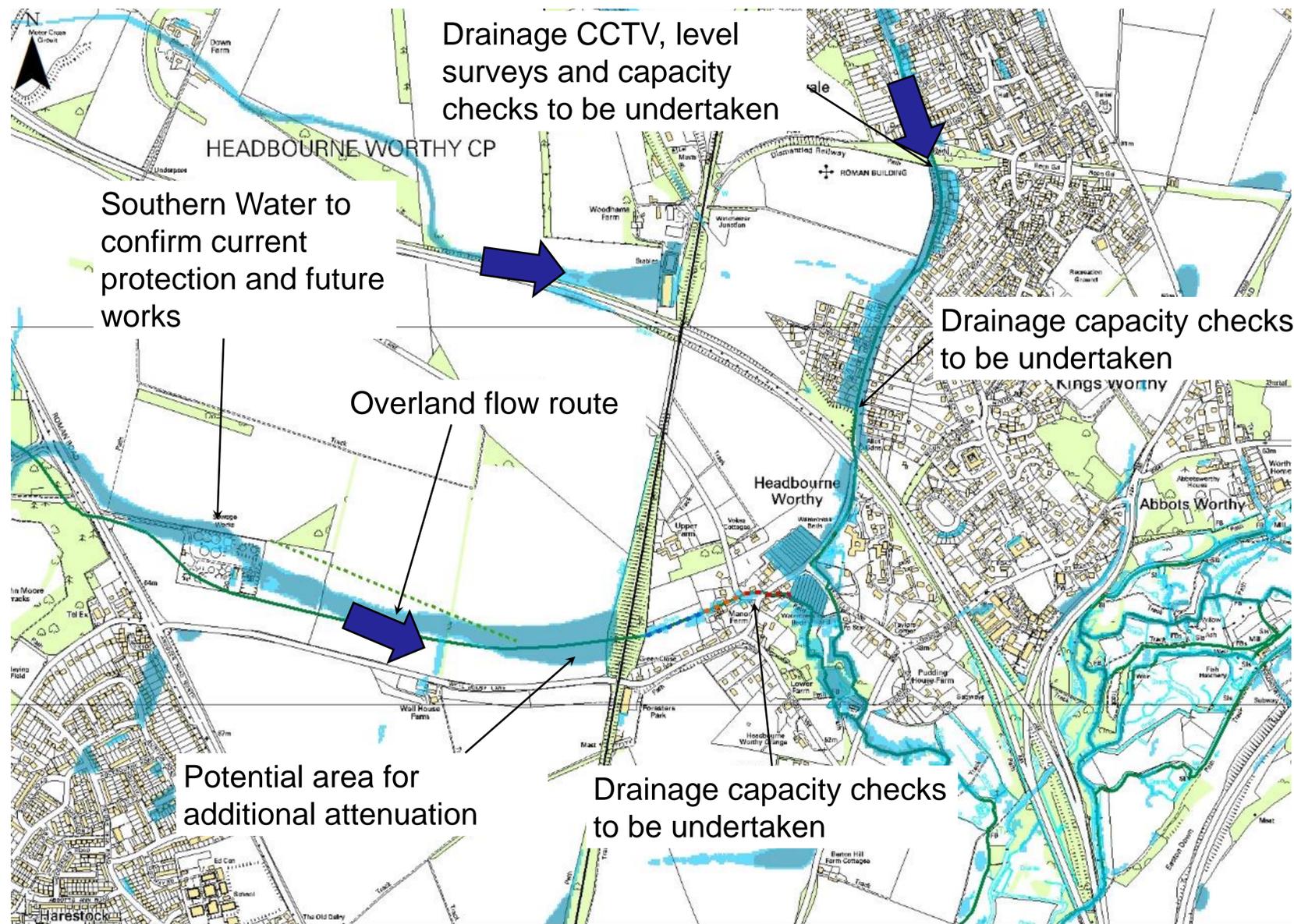
- Flood Risk and Hydraulic Assessment.
- Utility Checks to identify what services are present and where.
- Discussions with Defence Infrastructure Organisation (MOD) to agree on how flood water is managed.

Key Considerations

- Technical difficulties passing between properties in Pitter Close
- Permissions to discharge water onto DIO (MOD) property and future land use considerations.
- Funding availability to be clarified.
- Requirement for necessary approvals and consents.

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Headbourne Worthy & Kings Worthy



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Findings

- Flows follow the low point in the fields. There is potential to hold back some flows prior to the railway line dependant on agreements with the landowner and Network Rail.
- Flow paths converge south of the watercress beds which will be the critical location in determining maximum flow and volume capacity.

Recommendation

The key principles being assessed to reduce the risk of flooding include:

- Hold back water west of the railway bridge.
- Improve flow conveyance to reduce flooding within Headbourne Worthy.

Investigations / Assessment Required

Survey and assessment work being undertaken to clarify:

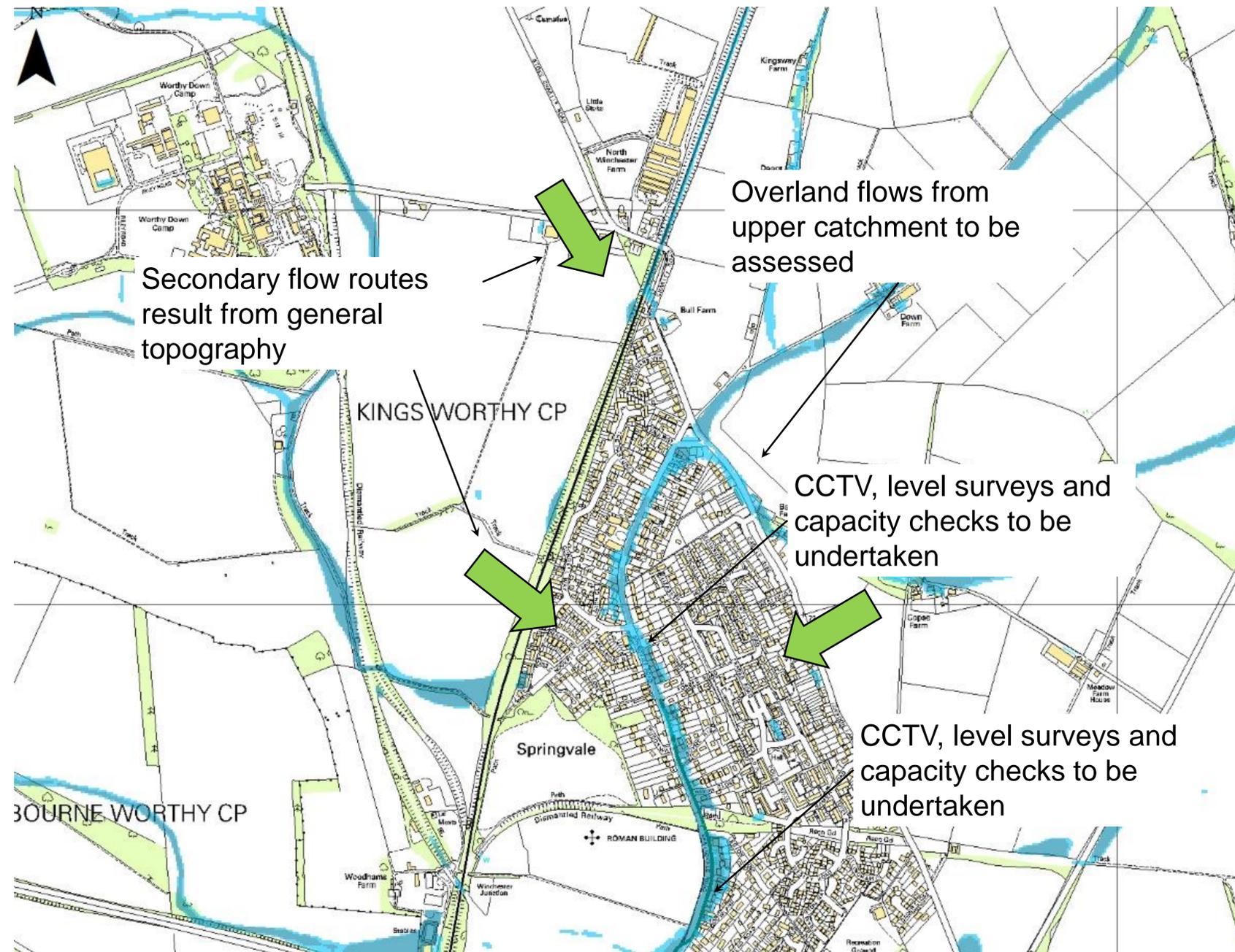
- Current capacity of drainage systems.
- Overland flow rates and volumes.
- Potential to increase current drainage provision.

Key Considerations

- Technical difficulties in upgrading drainage with multiple utilities blocking optimal route.
- Downstream constraints likely to limit flow rates.
- Funding availability to be clarified.
- Requirement for necessary approvals and consents.

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Kings Worthy



Findings

Minimal information available for this area but key areas of concern includes:

- Overland flows emerging to the north of the site.
- Risk of flooding at King Charles Pub.
- Suspected lack of capacity of existing drainage system.

Recommendation

The key principles being assessed to reduce the risk of flooding include:

- Hold back water to the north of the catchment.
- Improve drainage capacity where required along the flow path route.

Investigations / Assessment Required

Survey and assessment work being undertaken to clarify:

- Current capacity of drainage systems.
- Overland flow rates and volumes.
- Potential to increase current drainage provision.

Key considerations

- Technical difficulties in upgrading drainage with multiple utilities blocking optimal route.
- Downstream constraints likely to limit drainage that can be provided.
- Funding availability to be clarified.
- Requirement for necessary approvals and consents.

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What does the work involve?

- **Investigations**

This will include surveys of key ditches and culverts, CCTV of the drainage system, ecology and location of utilities. The investigations will provide information about the pinch points, constraints and overall condition of the drainage system before undertaking a detailed hydraulic assessment.

- **Landowner and Stakeholder engagement**

As some of the drainage infrastructure is on privately owned land, we will need to identify and engage landowners to gain access for surveys and explore the potential for appropriate measures.

Further information will be sought from other organisations who own or manage infrastructure along the route. These include the Environment Agency, Network Rail, Highways England, Southern Water, Defence Estates and the owner of the watercress beds.

- **Design**

Once all the information has been gathered, an initial design of appropriate measures, if technically feasible, will be prepared and costed.

- **Action Plan**

This is being prepared for all the organisations, parishes and land owners involved to enable a cohesive approach to flood risk reduction.

Key Milestones	Expected Completion
Investigations	December 2017
Landowner & Stakeholder Engagement	Ongoing
Hydraulic Assessment	Early 2018
Drainage Design & Review	Early 2018
Action Plan	Ongoing
Funding Strategy	Spring 2018
Confirmation of next steps	Spring 2018

- **Funding Strategy**

A cost benefit assessment will be undertaken to identify the potential funding availability from a range of sources including Flood Defence Grant in Aid, Regional Flood & Coastal Committee, Councils and other stakeholders.

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Action Plan

Action	Description	Why?	Who?
Outer Winchester Flood Alleviation	Investigate and develop appropriate flood alleviation measures (refer to next board).	To reduce flood risk to the local communities.	Hampshire County Council & Key Partners
Guidance on how to clear ditches	Provide guidance to riparian landowners on ditch maintenance.	To enable riparian landowners to ensure capacity for flow of flood water is achieved and maintained.	Hampshire County & Parish Councils
Impact of farms	Provide information on how the farms operate.	To improve understanding of their ability to retain flood water, their impact on the water quality and manage siltation from farms.	Hampshire County Council
Development Control	Planning and development is informed by a flood risk assessment.	To ensure new development does not increase flood risk.	Winchester City Council
Winchester Flood Plan	Flood Plan takes Outer Winchester into account.	To support catchment area approach to flood risk.	Winchester City Council
Advice on maintaining cesspits	Advice to householders about options for increasing resilience of cesspits to flooding.	To reduce the risk of foul water contaminating flood water.	Southern Water
Groundwater Levels	Monitor groundwater levels, agree trigger levels with the Environment Agency and link to emergency response plan.	To ensure adequate time for responding to flooding emergencies.	Parish Councils
Flood Action Group	Set up Flood Action Group.	To coordinate the development and implementation of a parish flood action plan.	Parish Councils
Parish Flood Action Plan	Prepare and implement a Flood Action Plan detailing key actions in the event of a flooding incident.	To identify effective measures to be implemented and key lines of communication in the event of an emergency.	Parish Councils
Riparian Landowners	Seek information about the responsibilities of riparian landowners.	To increase understanding of the need of riparian landowners to clear ditches.	Riparian Landowners
Ditch Clearance	Undertake clearance work of ditches and culverts.	To allow the existing drainage to operate effectively.	Riparian Landowners
Household Emergency Action Plan	Prepare individual households flood action plans.	To increase the ability of individual household to respond to flooding.	Individuals
Flood warning service	Sign up to flood risks alerts	To increase ability to respond to flooding incidents	Individuals

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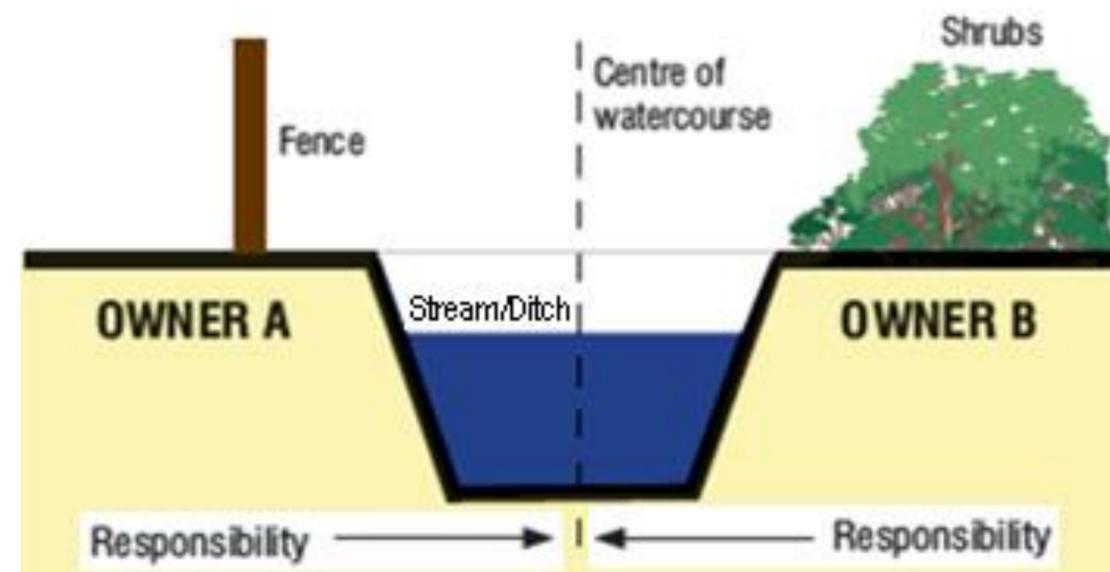
How you can help

Multiple factors contribute to flooding. These can be influenced by different organisations, groups and individuals. In order to tackle flooding effectively, it is necessary for different organisations, groups and individuals to be involved in the development and implementation of plans to reduce the risk of flooding.

Here are some of the ways in which you can help:

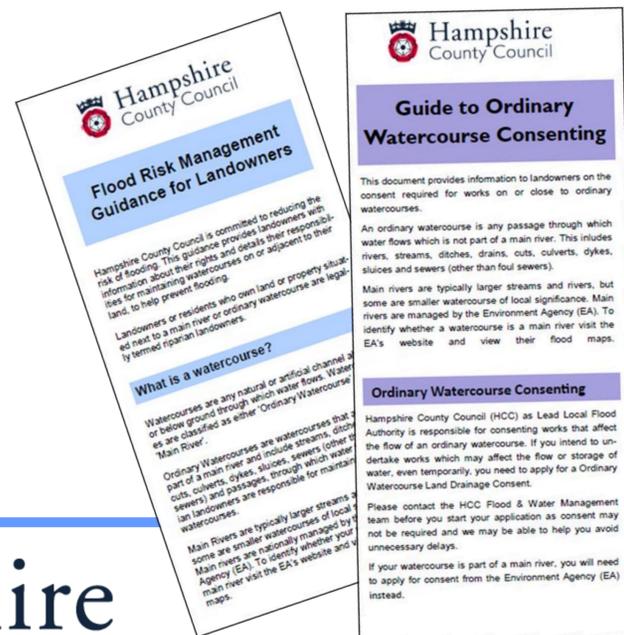
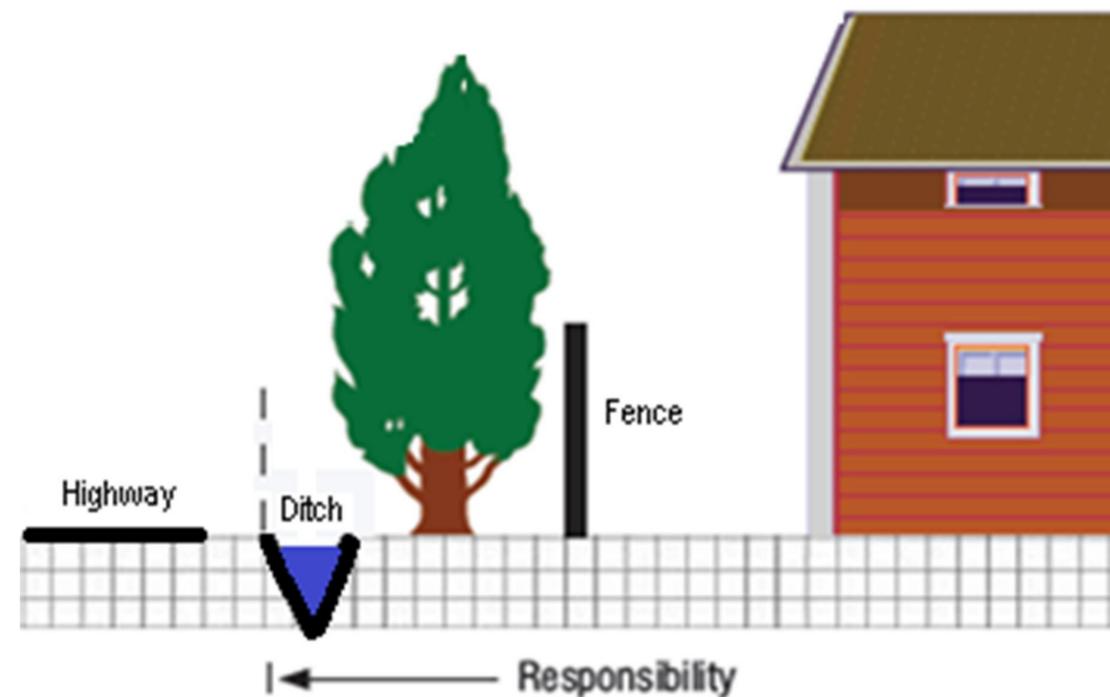
- Actively support the Flood Action Group for your area and help with development and implementation of a flood risk reduction action plan
- Provide local flooding information through your parish councillor
- Know your responsibilities as a landowner
- Find out more about flood prevention at www.hants.gov.uk/flooding
- You can sign up to the flood alert service in your area for up-to-date information during weather events. www.gov.uk/sign-up-for-flood-warnings

Shared responsibility of landowners



Sole responsibility of landowner where ditch is adjacent to the highway *

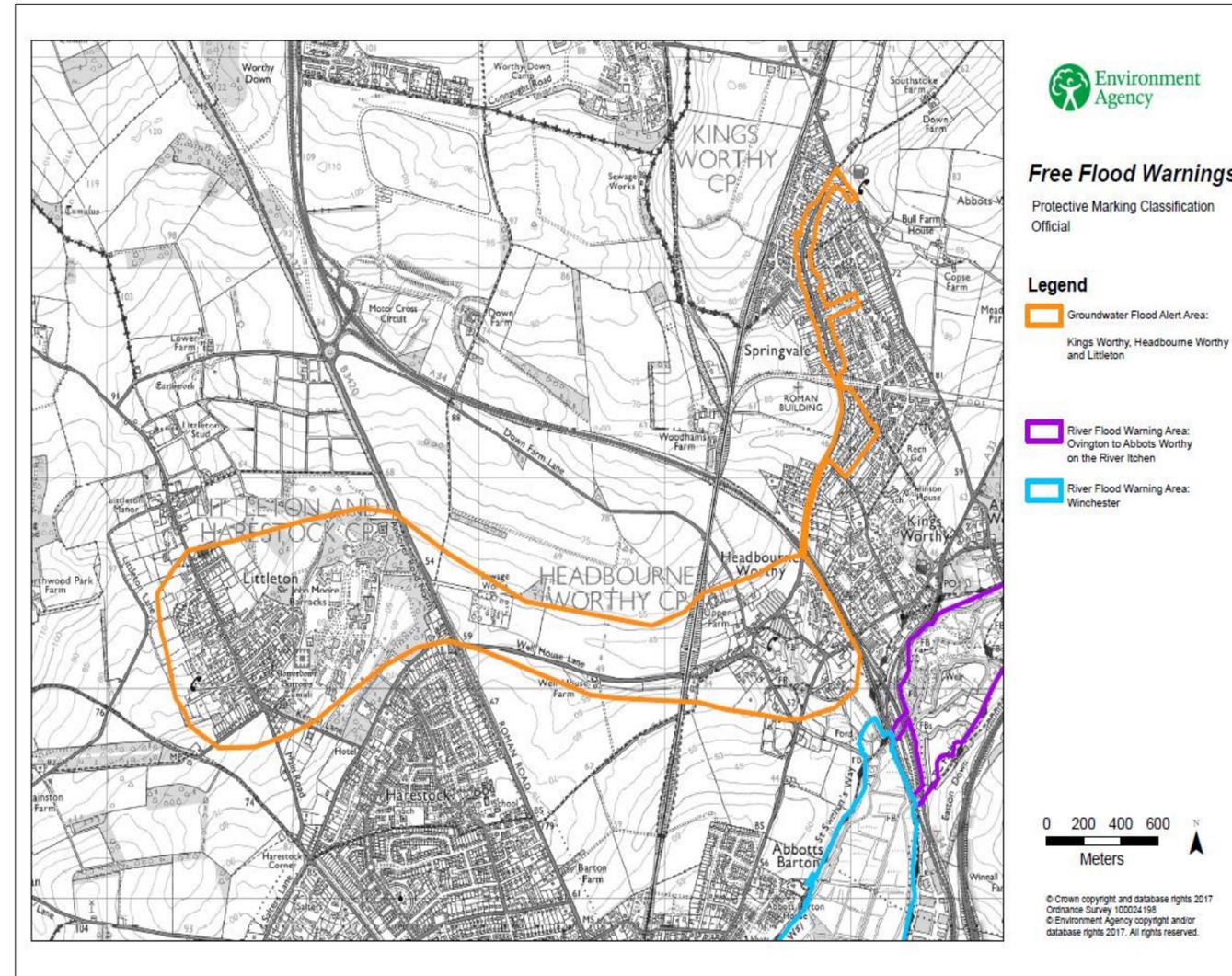
* In most cases



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How you can keep in touch

- The information displayed at this event will be available on our website at: www.hants.gov.uk/flooding from mid October 2017. Further updates will also be provided here.
- A copy of these boards will be left with the parish council so those who were unable to attend today will have a chance to see them.
- Hampshire County Council holds regular briefings with the parish, district and council members with responsibilities for the area. Please contact your representatives for updates.
- Please let us know if you have any information or questions by filling in a feedback form.



You can contact us at:
Flood enquiries: fwm@hants.gov.uk

You can let us know about highways information:
www.hants.gov.uk/index/transport/roadproblems

Thank you

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Please stick-a-dot where you live

