

COPYTHORNE PARISH COUNCIL

A meeting of the Flooding Advisory Committee was held on Thursday February 17th 2022 at the Royal British Legion Hall, Winsor Road, Winsor starting at 10am.

Present Members: Cllrs. Graham Chillcott (Chair), Lady Kara Hawks, Sylvia Wiggins, Sarah Coombs

Observer: Mr. David Rigby – Clerk and RFO

A G E N D A (with DRAFT notes of discussion)

1. Apologies for absence.

None

2. Declarations of Interest.

None

3. Review of notes of previous meeting (November 29th 2021) and action points.

Those members present at the previous meeting were happy that the notes of the meeting accurately reflected the discussions.

4. Discussion of response received from HCC to the points raised regarding the HCC F&WM Team Copythorne Village Flood Investigation Report.

GC took those present through the report prepared by the Clerk for this item. It was agreed that ongoing monitoring of the next steps contained within the HCC F&WT report together with the "Catchment Management Plans" referred to in the e-mail received from Tom Callaway of the HCC F&WM Team on December 23rd 2021 should be included within the Flooding Advisory Committee's quarterly "Review of Work Programme".

5. Discussion of the HCC F&WM Team Bartley Flood Investigation Report.

GC took those present through the report prepared by the Clerk for this item. It was agreed that the eight "Initial Observations" contained in the Clerk's report should be raised with the HCC F&WM Team for their comments. As with the "Copythorne Village Flood Investigation Report" this recommendation should be presented to Council for their approval.

ACTION – The Clerk to prepare a formal report to be submitted to Council for them to approve as an agenda item at the Council meeting on March 8th 2022.

6. Review of Work programme for the Flooding Advisory Committee for year ending April 2022.

GC when through the items listed on the "Review" and the following updates and/or actions were agreed by those members present:-

1. Note to be changed to "Ongoing quarterly review against "Next Steps" with the HCC F&WT Team report".
2. Cllr. Wiggins to begin 2022 review of Parish Flood Plan, to include a section on actions for residents to take to benefit themselves and others (clear ditches, unblock catch pit gully covers etc.) **ACTION by SW**
3. See notes related to Item 7 on today's agenda.
4. Clerk to add updated dates of Environment Agency & Highways England contacts. **ACTION by Clerk**
5. Follow up on any o/s issues from the "Walk the River" with the EA in September 2021. **ACTION by Clerk**
6. Monitor for any flooding related to this issue.
7. HCC works continuing.
8. Ongoing
9.
 - a. Remains a watching brief
 - b. Work has started, Clerk to chase HCC Highways for an update. **ACTION by Clerk**
 - c. Remains a watching brief, no flooding from ditch reported.
 - d. GC to provide Clerk with specific details to raise with HCC F&WM Team. **ACTION by GC then Clerk**
 - e. See point 6 above
 - f. Continue to chase to remove debris & progress issue of water runoff from field beyond. **ACTION by Clerk**
 - g. Remains a watching brief, regular checks by the Clerk confirms that the drain to field remains clear.

7. Review of Flooding Advisory Committee requested works programme for the Lengthsman.

The following tasks were identified to be passed to the Lengthsman:-

Clear vegetation from white railings along Furzley Lane and Southampton Road (near Cadnam Bridge).

Clear ditch alongside Shepherds Road (section parallel to Bartley Water at rear of Chingham Road houses).

Clear ditch at corner of Rockram Close/New Inn Road

ACTION – Clerk to instruct Lengthsman.

8. Discussion of other matters relating to the Aims and Responsibilities of the Flooding Advisory Committee.

None

9. Agree date for next meeting.

Friday May 20th 2022

Draft

Copythorne Parish Council - Flooding AC Meeting – February 17th 2022

Item 3 – Review of notes of previous meeting (November 29th 2021)

A meeting of the Flooding Advisory Committee was held on Monday November 29th 2021 at Copythorne Parish Hall (rear extension) starting at 9am.

In accordance with the Local Government Act 1972 (s.100) the public are able to attend and observe meetings of the Flooding Advisory Committee but do not have the right to participate (unless invited to do so by the Chairman of the meeting).

Members: Cllrs. Graham Chillcott (Chair), Lady Kara Hawks, Sylvia Wiggins

Observer: Mr. David Rigby – Clerk and RFO

A G E N D A (with DRAFT notes of discussion)

1. Apologies for absence.

None

2. Declarations of Interest.

None

3. Review of notes of previous meeting (November 4th 2021) and action points.

All present were happy that the notes of the previous meeting accurately reflected the discussions

4. Discussion and approval of Cllr. Chillcott's response to HCC F&WM Team Copythorne Village Flood Investigation Report – May 2021

Cllr. Chillcott provided those present with a report detailing his proposed comments based on the discussions held at the last Flooding AC meeting on November 4th 2021. Those comments were then discussed and agreed upon by the three members present. A copy of the agreed comments is attached as Item 4.

****ACTION – Cllr. Chillcott to provide the Clerk with a formal report to be submitted to Council for them to approve as an agenda item at the Council meeting on December 14th 2021. Cllr. Chillcott's report was received and approved by Council on December 14th 2021 (Item 10). Letter sent to HCC F&WM Team on Dec 16th 2021, reply received Dec 23rd 2021 (to be discussed at next Flooding AC meeting)**

5. Discussion of any urgent matters related to the Aims and Responsibilities of the Flooding Advisory Committee

It was reported that the Clerk had - as requested by Cllr. John Goodwin – sent an e-mail to County Cllr. Edward Heron to ask him to support the Council's efforts to ensure HCC Highways rectify a surface water drainage issue near a property called The Wilderness in Winsor Road. The Clerk further reported that he had – again at the request of Cllr. John Goodwin - advised Bartley School of the ongoing actions regarding the above issue which on occasions impacts on some of the children attending the school.

Cllr. Chillcott asked if future notes of Flooding Advisory Committee meetings (and all the Council's Advisory Committees) could include reference to the fact that all recommendations needing to be submitted to Council for approval had been recorded in the notes. The Clerk advised that the "Reporting to Council" section of the "Terms of Reference" already by inference included this but that he would include such a note as requested.

6. Agree date for next meeting.

Friday February 18th 2022, 10am

Meeting ended at 9.35am

Copythorne Parish Council - Flooding AC Meeting – February 17th 2022

Item 4 – Discussion of response received from HCC to the points raised regarding the HCC F&WM Team Copythorne Village Flood Investigation Report

BACKGROUND

At the Flooding Advisory Committee meeting on November 29th 2021 the members approved a response to the HCC F&WM Team Copythorne Village Flood Investigation Report and agreed to ask Council (at it's meeting on December 14th 2021) to approve the sending of the response to HCC for consideration.

Council approved the letter (minute 216/21) which was sent on December 16th 2021.

A response was received on December 23rd 2021 along with an amended copy of the report reflecting actions related to the Flooding Advisory Committee's comments and HCC responses

CURRENT POSITION

The text of the letter sent is attached as Appendix A along with the response. Letter text is in black with response text in red.

The amended report is also attached

ACTION REQUIRED

Members of the Flooding Advisory Committee are asked to consider the responses and decide on the next steps.

David Rigby
Clerk to Copythorne Parish Council
February 4th 2022

APPENDIX A

HCC Copythorne Village Flood Risk Investigation Report

Thank you for sharing the “Copythorne Village Flood Risk Investigation Report” with the Parish Council back in May 2021. Having read it, Copythorne Parish Council would like to make a few comments and suggested amendments please:-

- i. Page 2, Executive Summary 3rd paragraph, we would like to see the proposed Bartley Village report issued as a standalone report rather than as an addendum to this one please.
The Bartley report was described as an addendum but is very similar in format to this report. I have amended the text in the report to reflect this.
- ii. Page 4, can we ask if the flood maps (Figure 3) have been remodelled and if so when please?
Flood maps are maintained by the EA, if you have concerns over the latest modelling it would be best to contact the EA directly.
- iii. Page 9, Para.2.5 1st sentence: amend to read “The New Forest District Council is the planning authority covering those parts of Copythorne Parish that lie outside the National Park.”
Done
- iv. Page 10, Para.2.6 Add a sentence to say “The New Forest National Park Authority is the planning authority covering the majority of Copythorne Parish except a small corner in the north east.”
Done
- v. Page 11, Para 2.7 3rd sentence: change “ditch to culvert” and add “this remains ongoing and is yet to be resolved, (See also Image 2 on Page 21).”
Done
- vi. Page 11, Para. 2.7 4th sentence: add after 2011 “and subsequently updated.”
Done
- vii. Page 15, Para 4 See also comment against Executive Summary on page 2.
Done
- viii. Page 16, Para 4.1 3rd sentence: We would like to bring to your attention that there is further information available about flooding events in Pollards Moor Road, for an example see planning application 15/00484.
I couldn't access any details using the reference provided for some reason so I have added a general comment. We try not to identify individual properties externally.
- ix. Page 16, Para 4.1 4th sentence: can we ask please for this review to be held.
The asset management register mostly contains Highway drainage assets as far as I can tell. These are reviewed by Hampshire Highways, and Flood & Water Management team have no control over this. I would recommend contacting Hampshire Highways for more information. I have developed a new drainage feature record for our internal use, to help us with flooding investigations, planning responses and ordinary watercourse consents. If resources allow I will look into adding drainage features in this area.
- x. Page 19, Para 5 4th sentence: We should like to point out that flooding has re-occurred since 2013-14. Mulberry Cottage and Riverside properties are more recent examples.
Noted and details added. We try not to identify individual properties externally.

- xi. Page 19 Next Step Table: Please add how often the CCTV the surface drainage water system survey is to be undertaken, i.e. monthly, yearly, every other year.
Again this is a Hampshire Highways function if the assets are adopted by them. The maintenance schedule may differ for different assets and may change over time, so it may not be appropriate to include these details in a report. Hampshire Highways should be contacted for up-to-date information if you need it.

Additional HCC response comments:-

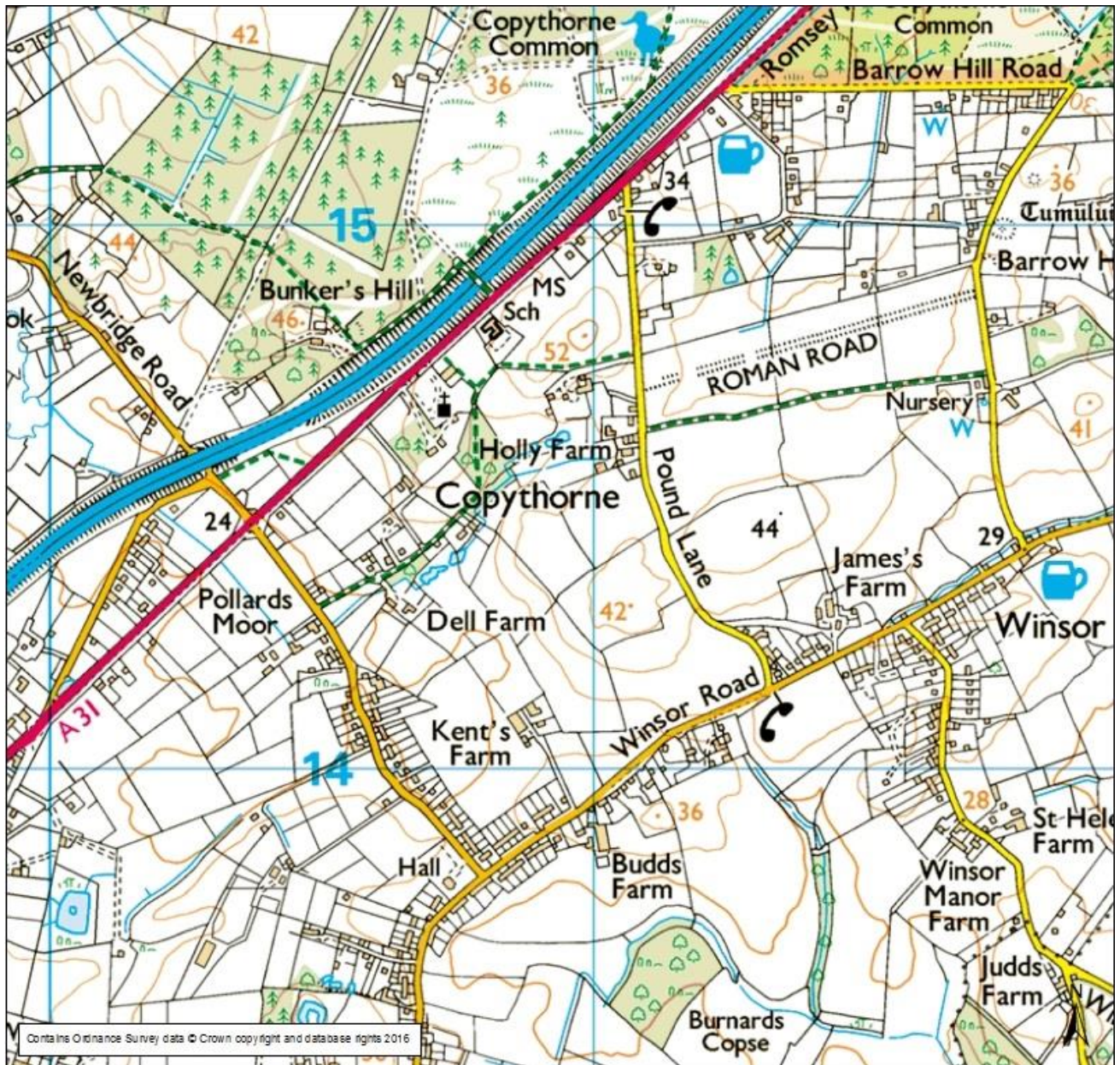
We generally will not be producing this style of report any more so are trying to close these down. Please note also that these reports were originally developed to be internal only. We are developing a new more concise style of reporting for flooding incidents that are classified as moderate or greater (in accordance with our policy that can be found on the HCC website).

In addition to this we will also be launching a public consultation on our new Catchment Management Plans next year (date to be confirmed). These plans will highlight Catchment Priority Areas that will have an enhanced policy attached to them. Having worked on early drafts, I can say that it is very likely that there will be one such area relating to Copythorne (falling under Cadnam), so please keep a look out for any communication from us on this.

As always, if you have any issues with flooding, unmaintained ordinary watercourses, unconsented works in ordinary watercourses then please let us know – the easiest way for us to receive these reports is through the website. Any issues with Hampshire Highways' drainage use the online form also and answer for highway drainage. Any issues with the Main River sections then please report to the Environment Agency.

Copythorne Village – Flood Risk Investigation Report

December 2021



Notice

This Document and its contents have been prepared by and for use solely by Hampshire County Council. Hampshire County Council assumes no responsibility to any other party in respect of or arising out of or in connection with this document and/ or its contents.

The purpose of this report is to provide information on the current risk of flooding and to suggest options that may be used to mitigate flood risk at this location based on the current evidence.

Hampshire County Council Flood & Water Management

<https://www.hants.gov.uk/landplanningandenvironment/environment/flooding>

Revision	Purpose Description	Prepared by	Checked by	Approved by
2	Draft Internal Review	JP/PGC	TC	SC
	Final	JP/PGC	TC	SC

Executive Summary

- This investigation of the village of Copythorne within Copythorne North Ward was undertaken by Hampshire County Council as the Lead Local Flood Authority to understand the flood event that occurred in 2013-14, and relevant historic occurrences, review actions taken since 2013-14; and consider what, if any, further actions may be required to address residual flood risk. The focus has been on Pollards Moor Road, Winsor Road and the land adjacent.
- The report could be used to inform the development of any future measures to reduce flood risk.
- Copythorne village in the New Forest has a tributary of the Cadnam River, classified as 'Main River', flowing parallel to one of the main roads in the village, Pollards Moor Road. The north of the village sits within the catchment of the Cadnam River, whilst the south of the village sits within the catchment of Bartley Water. A separate report has been produced for the village of Bartley in the ward of Copythorne South.
- There has been historic flooding in Copythorne village, most notably during the winter of 2000-01 when surface water flooded one property internally, two externally, and part of Pollards Moor Road. Highway flooding also occurred in winter of 2013-14
- Actions have been taken since this flooding to reduce the risk to households and the road, including work by Hampshire County Council, the District and Parish Councils and homeowners
- Various documents have been produced by or in partnership with Hampshire County Council, New Forest District Council, New Forest National Park Authority, the Environment Agency and Copythorne Parish Council regarding the flooding in the Parish of Copythorne and the wider New Forest area

The purpose of this report is to:

- Understand the current information available and formalise this within a single report
- Clarify the flood risk of the area
- Understand what works have been undertaken within the area
- Provide an overview of the flooding mechanism and impacts of any flooding
- Identify potential affordable engineering and non-engineering options that could reduce, or better manage, flood risk in the area

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1. Background

Copythorne is a village located in the civil parish of Copythorne North, approximately 5km west of Totton, in the New Forest district (see Figure 1). The village lies immediately south of the M27 and has a handful of amenities including a church, infant school, pub and hall, as well as multiple farms. The principal local watercourse is the Cadnam River (a 'Main River'¹), with a tributary of this river running parallel to one of the main roads in the west of the village, Pollards Moor Road, behind a number of private properties. The geology of the area comprises variable deposits of sands, silts and clays.

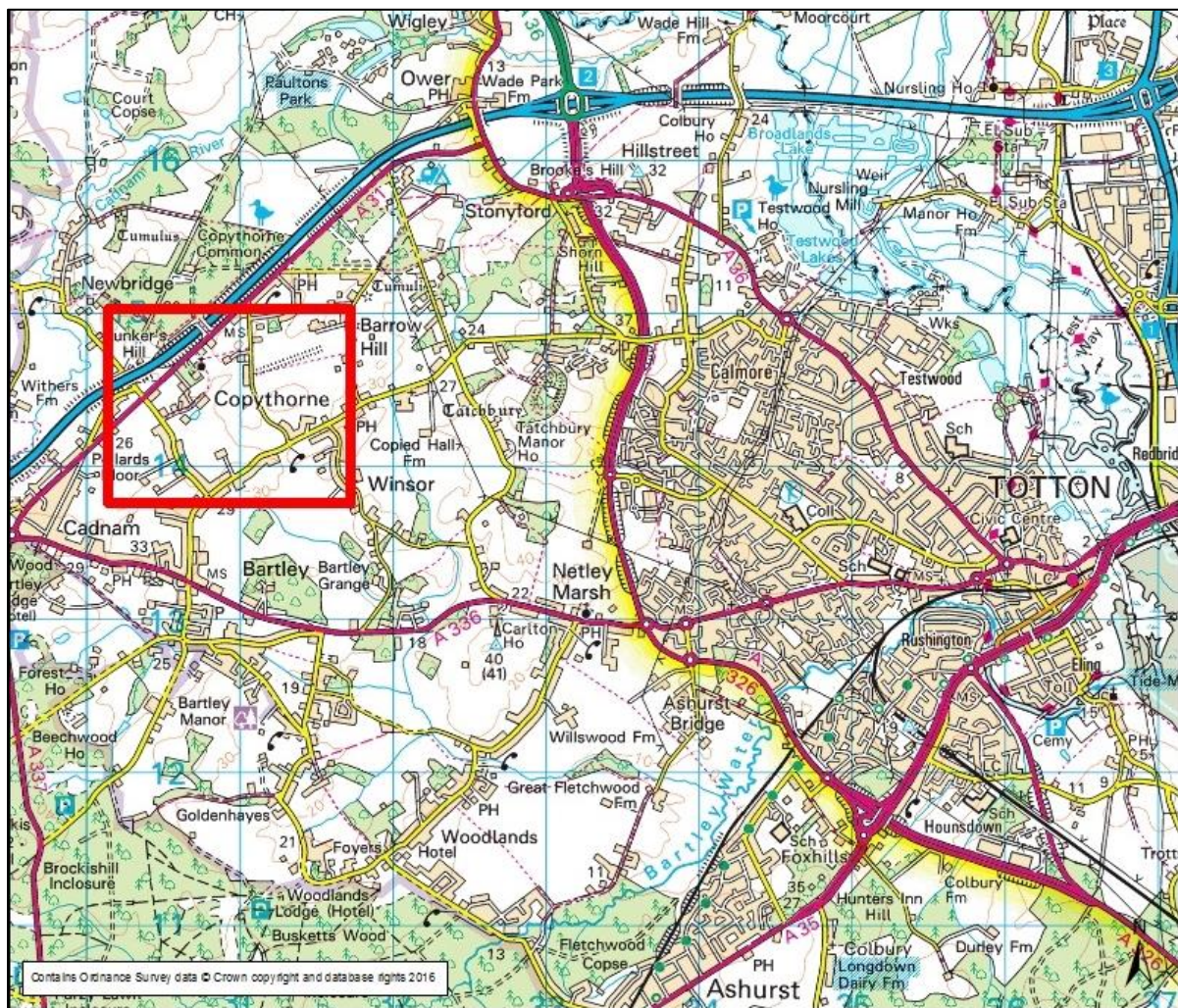


Figure 1: Copythorne location plan

¹ A Main River is typically a larger stream or river, but can be a smaller watercourse of local significance. Main Rivers are nationally identified and managed by the Environment Agency.

Pollards Moor Road runs for approximately 900 metres broadly south-east to north-west. The northern most 800 metres is considered to be in the catchment of the Cadnam River. South of this point, below the crest in the highway, the village is in the catchment of Bartley Water (see figure 2).

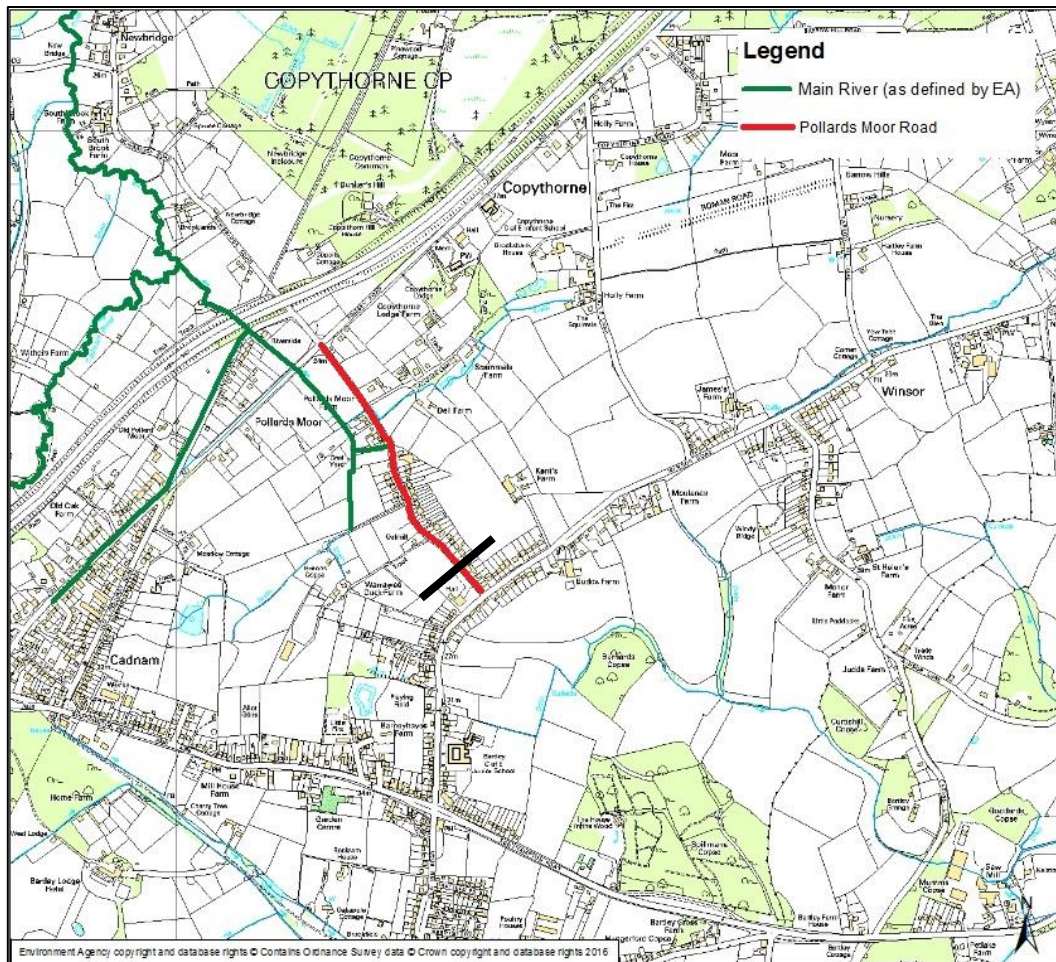


Figure 2: Local map of Copythorne showing the Cadnam River tributary (Main River) and additional ordinary watercourses including tributaries for the Cadnam River and Bartley Water (south). The black line refers to the location where Pollards Moor Road peaks – north-west of this point is within the catchment for the River Cadnam, south of this point is within the catchment for Bartley Water.

1.0. What is the flood risk in Copythorne village?

In December 2009, the Environment Agency (EA) published its New Forest Catchment Flood Management Plan which detailed flood risk and potential options for managing this risk. This document did not specifically reference Copythorne village but did highlight the risks related to flooding from the Cadnam River, a tributary of which flows through Copythorne village. The EA is responsible for managing Main Rivers and the

associated flood risk. They also provide mapping which illustrates the potential risk from fluvial (river), coastal and surface water flooding.

Copythorne village, according to current EA mapping, is not at risk from river flooding and sits within flood zone 1. The Main River tributaries in Copythorne village had not been previously modelled for fluvial flood risk and hence there are no associated flood zones. However, this area has recently been remodelled and the flood map will be updated to show the flood risk.

The area is at risk from surface water (rainfall) flooding. The risk areas broadly follow existing watercourses (including the Main River that runs parallel to Pollards Moor Road) with localised areas where it extends into adjacent land. Most of this land is agricultural or open land; however there are some properties within this area.

Figure 3 details the surface water flood risk for Copythorne using EA data. High risk refers to an area with a chance of flooding greater than 1 in 30 in any given year, medium risk between 1 in 100 and 1 in 30, and low risk less than 1 in 100 chance of flooding in any given year.

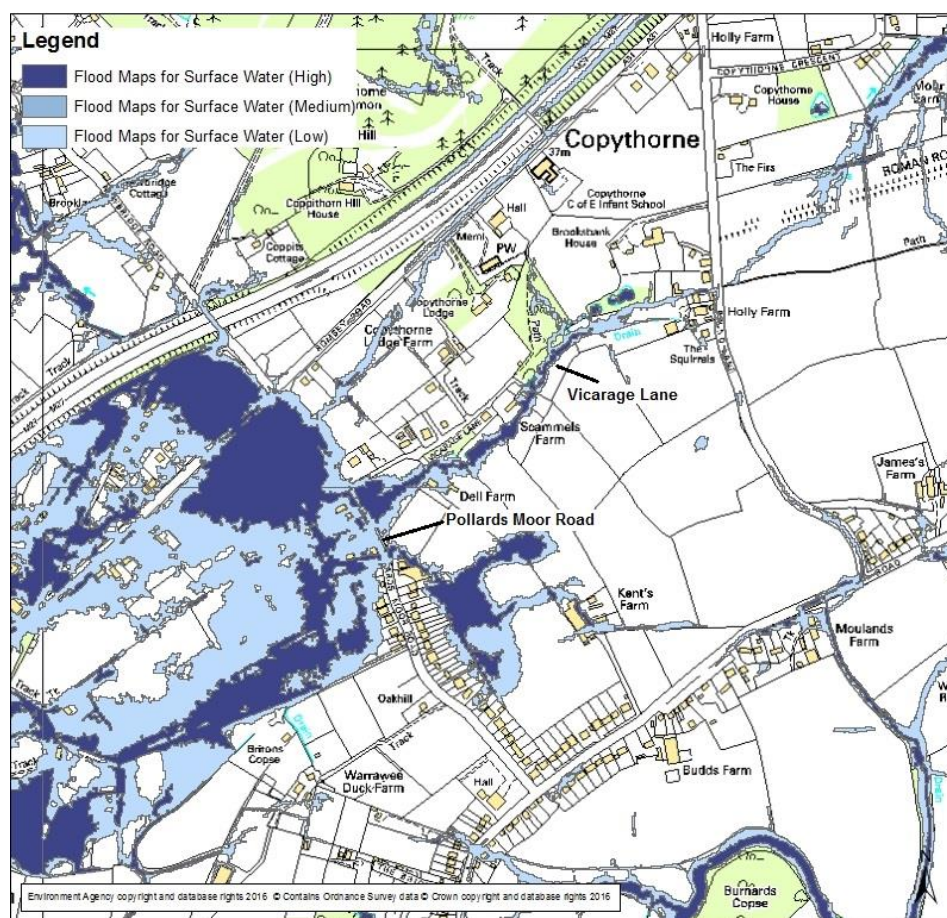


Figure 3: Surface water flood map for Copythorne North

Maintenance and drainage of flood-prone land adjacent to Pollards Moor Road has been the subject of many discussions between Hampshire County Council, Environment Agency, New Forest National Park Authority and Parish Council. It is understood the level of this land (see figure 4) had been increased in 2006 with illegally dumped waste, and that the watercourse was culverted. In 2007, the landowner was taken to court by the Environment Agency for offences relating to flood risk, illegal deposit of waste and environment protection. In January 2012, the Parish Council contacted the New Forest National Park Authority with a number of concerns regarding the same piece of land and potential increased flood risks from a planned section 106 agreement. According to a New Forest National Park Authority briefing note on 14 March 2012, it is understood some waste was removed and the watercourse reinstated in 2009. See section 2.3 for further information on the Environment Agency and this area of land.

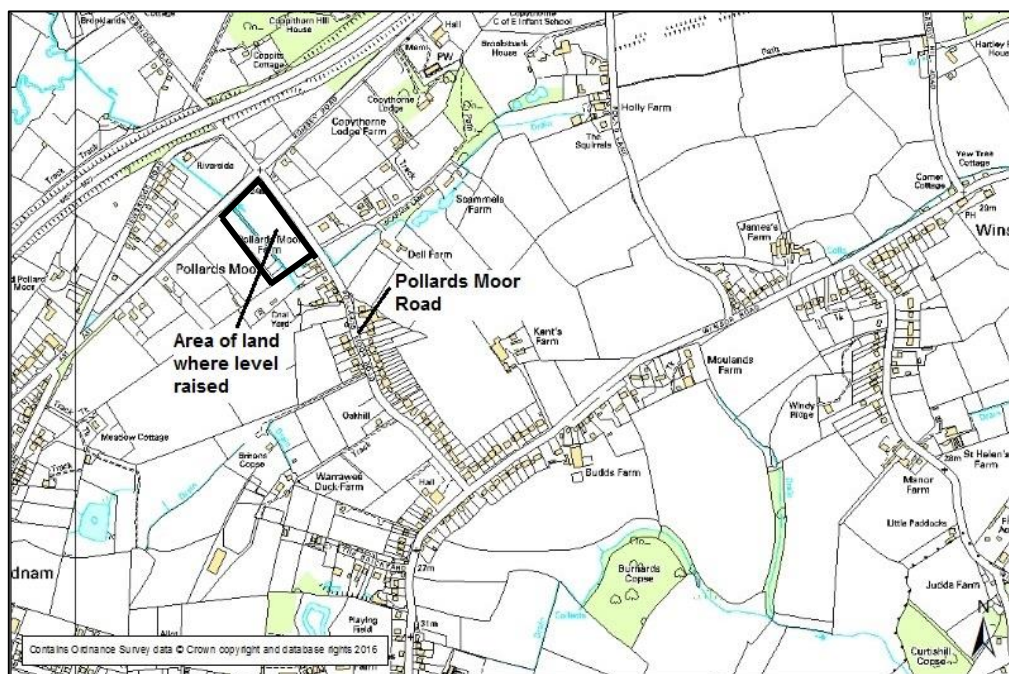


Figure 4: Local area map showing Pollards Moor Road and area of land discussed in November 2012 Parish Council meeting

1.1. What flooding has taken place in Copythorne village?

Copythorne village has limited historical records of flooding. There are reports of flooding of the highway at Pollards Moor Road following heavy rainfall and, in 2000, some internal and external property flooding on the same road following heavy short-duration rainfall events in late October, early November and late December. There was recorded rainfall in the area with a frequency of occurrence for annual and winter rainfall of less than once every 100 years, and for 1-, 2- and 3-day rainfall maxima of 35, 14 and 10 years respectively. Groundwater levels are likely to have been raised to record levels during this period, resulting in localised spring flow providing further

The key actions recommended by the 2002 report that involved Hampshire County Council were:

- Copythorne Parish Council should work with Hampshire County Council Emergency Planning Unit to develop a Village Flood Plan so that the community is prepared to respond to future events.
- Hampshire County Council, New Forest District Council and Copythorne Parish Council, in conjunction with riparian owners, should review the maintenance and provision of the surface water drainage system. Works to be considered include provision of road drainage along Pollards Moor Road.

2. What actions have been taken to address flood risk?

2.1. Lead Local Flood Authority, Hampshire County Council

Hampshire County Council as the Lead Local Flood Authority (LLFA) is responsible for managing the risk of flooding from groundwater, surface water (rainfall) run-off, and ordinary watercourses. The LLFA also has powers to enforce maintenance on ordinary watercourses to ensure that they remain functional and grant ordinary watercourse consents for temporary and permanent work on ordinary watercourses. No ordinary watercourse consents have been granted for changes to watercourses in Copythorne since the LLFA became responsible for issuing them.

Hampshire County Council (HCC) assumed the role of the LLFA under the terms of the Flood and Water Management Act 2010. In May 2013, HCC produced the Hampshire Local Flood Risk Management Strategy (HLFRMS), Document 3 – Action Plan. This ranked various sites in the county according to flood risk based on, amongst other things, groundwater and the EA Flood Map for Surface Water. Copythorne North (which includes Copythorne village) received a Low ranking overall, ranked 163 out of 248 wards.

In November 2012², HCC presented an update on the consultation on local flooding issues at Copythorne Parish Council's planning meeting. Minutes from this meeting indicate a discussion on HCC's planned Local Flood Risk Management Strategy and the responsibility of HCC as the lead authority for managing local flood risk.

Following the flooding events in 2013/14, Copythorne was included in a county-wide submission of locations to Defra seeking support for potential flood risk reduction measures. Copythorne was included in Defra's unfunded 7 year plus Flood and Coastal Erosion Risk Management Programme and identified in HCC's Flood Risk and Coastal Defence programme. Investment from either source is dependent upon a

² 13 November 2012 – Planning Meeting

detailed understanding of the flood risk, and the cost of any measures being weighed against the benefit that would be secured.

2.2. Highway Authority, Hampshire County Council

HCC as the Highway Authority is responsible for the maintenance of all adopted roads and their associated drainage within the highway boundary. The Highway Authority also has powers that enable it to undertake flood prevention works on ordinary watercourses. It should be noted that the majority of roadside ditches are the responsibility of the adjacent riparian landowner rather than the Highway Authority. Most highways are constructed via a dedication of land by landowners, meaning the soil beneath the highway remains in the ownership of the landowner.

In December 2014, the Highway Authority carried out some work on Pollards Moor Road, near the junction with Vicarage Lane, to clear existing ditches and construct a concrete base in front of a culvert. This work was undertaken to reduce the risk of flooding to the highway. In February 2015, HCC carried out further work on Pollards Moor Road to lower a gully and reinstate a verge.

Drainage assets are recorded by the Highways Authority for internal use only. The information recorded may be incomplete and based on the best available information.

2.3. Environment Agency

The Environment Agency is responsible for taking a strategic overview of the management of all sources of flooding and coastal erosion. This includes, for example;

- setting the direction for managing the risks through strategic plans;
- providing evidence and advice to inform Government policy and support others;
- working collaboratively to support the development of risk management skills and capacity;
- and providing a framework to support local delivery.

The Agency also has operational responsibility for managing the risk of flooding from main rivers, reservoirs, estuaries and the sea, as well as being a coastal erosion risk management authority. As part of its strategic overview role, the EA has published a [National Flood and Coastal Erosion Risk Management Strategy for England](#). The strategy provides a lot more information designed to ensure that the roles of all those involved in managing risk are clearly defined and understood.

As referenced in section 1.1 of this report, the EA took action against a landowner regarding raising the level of their land, the material used for said raising, and culverting a watercourse (see figure 4). The watercourse running through the land is classified as a Main River. It is understood the raising of the land using waste occurred in 2006, with the aim to prevent flooding on the land, and an enforcement notice to clear the waste was issued three months after the work was completed by the New Forest National Park Authority. The landowner removed some of the waste material from the site in 2009 and reinstated the watercourse. It is understood following this the EA commissioned a survey in 2009 of the site to ascertain the volume of waste in the field and consider if the waste posed an additional flood risk. In 2011, the EA completed a flood risk assessment of the area and concluded the surrounding properties do not have an increased flood risk stemming from the changes in land height.

On 26 February 2013, a message from the EA was recorded in the Parish Council minutes. The minutes detail that the Environment Agency had asked Parish Councils for help in recording the local impacts of flooding to help improve the flood warning service. Members agreed that future events should be photographed and recorded where possible to assist this exercise.

2.4. Southern Water

There are a number of reports of leaking pipes and renewal of stopcocks along Pollards Moor Road from Southern Water, as well as one sewer collapse, in the last ten years. In addition, minor flooding outside a sluice valve cover on Pollards Moor Road at the junction with Winsor Road was observed during an inspection by Southern Water in May 2017.

2.5. New Forest District Council

The New Forest District Council is the planning authority covering those parts of Copythorne Parish that lie outside the National Park.

In September 2007 Halcrow Group Ltd., on behalf of the Council and in conjunction with the New Forest National Park Authority, published their Strategic Flood Risk Assessment for Local Development Frameworks which highlighted the various flood risks across the New Forest. This document did not specifically reference Copythorne in the text but did detail previous flooding across the New Forest in diagrams, including some in Copythorne.

With regards to flooding, the Council does not provide sandbags for general issue to householders or businesses. It maintains a limited stock of sandbags to meet its own needs in responding to a flood emergency and to help householders and businesses to respond to a one-off, unexpected and exceptional emergency situation. In such an

event, sandbags will be deployed to protect life (prioritising the vulnerable), critical infrastructure and buildings. Sandbags will not be used to protect gardens, outbuildings or other non-residential structures.

2.6. New Forest National Park Authority

The New Forest National Park Authority (NFNPA) is the planning authority covering the majority of Copythorne Parish except a small area in the north east.

The NFNPA is responsible for promoting the purposes of the National Park and the interests of those who live and work in it. A Planning Development Control Committee made up of eight Local Authority appointed Members and six Secretary of State appointed Members review planning applications within the National Park boundaries, and can provide feedback based on flood risk.

In April 2014, the EA provided information to the NFNPA detailing the impact of the floods over the winter of 2013-14 and initial plans for the months ahead. This presentation did not directly reference Copythorne.

In June 2016, the EA provided further information to the NFNPA setting out the responsibilities of the EA, the Lead Local Flood Authority (HCC), the New Forest District Council, the local water company (Southern Water) and landowners. The presentation³ covered the work that had taken place since the 2013-14 floods, including comments on Cadnam and Copythorne regarding asset inspections and liaising with the Highway Authority. More specifically, the presentation detailed that vegetation at Pollards Moor was now being cut on an annual basis in an attempt to reduce vegetation impeding water flow.

2.7. Copythorne Parish Council

The Parish Council has a great deal of local knowledge on the previous flooding events, and the topic of flooding has been covered at numerous meetings.

At a Parish Council meeting in November 2014, the topic of flooding was discussed. It was noted the situation with regards to flooding had improved but there remained concerns for the coming winter (2014-15) as Met Office reports predicted the worst winter in terms of rain for thirty years. The Parish Council confirmed they had received agreement from HCC that planned works in Pollards Moor Road and Romsey Road

³ 'Flood risk in the New Forest'

would be completed by Christmas (2014). These works are detailed in section 2.2 of this report.

At the Parish Council meeting on 27 November 2012, a discussion occurred regarding a telegraph pole obstructing a culvert in the north of Pollards Moor Road. Council members confirmed the ditch was blocked and asked the Clerk to pursue the matter further. It is understood the electricity pole is owned by Scottish and Southern Energy. In the subsequent Parish Council meeting on 22 January 2013, minutes state the electricity pole has damaged a pipe in the ditch. This remains ongoing and is yet to be resolved.

Following a recommendation from the EA, the Parish Council has devised a Village Flood Plan (first published in 2011 and subsequently updated) covering all villages in the Copythorne Parish. The Plan details different types of flooding, how to reduce risk through flood prevention and actions to take depending on severity of impact. The Plan also includes contact details and explanations of role in a flood situation for relevant authorities including the various Councils involved (Parish, District, County), utilities and EA. The Plan is designed to raise awareness of flood risk and attempt to alleviate some of the impact through planning and education.

3. Site assessment

An initial site visit occurred on the afternoon of Thursday 11 January 2018, after several days of dry weather. It was overcast but with no precipitation and a light wind. The site visit was undertaken by officers of HCC⁴ and included a review of the full length of Pollards Moor Road, the entrance to Vicarage Lane, Winsor Road around the junction with Pollards Moor Road, the junction with Romsey Road up to the Main River culvert and the entrance to The Brickyard (see Figure 6). During the visit, a number of members of the public shared their experiences and knowledge with the team members.

An additional brief site visit to Winsor Road was carried out on 23rd April 2019 at the invitation of Cllr John Goodwin.

Unless specified, the following observations relate to the time of the initial site visit only and this report acknowledges that changes to the state of the land and assets referenced can occur at any time. Observations were made from publicly accessible points only (such as the highway or a public right of way) and as such there may be some gaps or assumptions made.

Summary of observations (see Figure 6 for location numbers)

⁴ Flood and Water Management (FWM), Engineering Consultancy (EC), Highways Authority

- 1 The owner of Brook View on Winsor Road confirmed a ditch runs alongside the boundary between Brook View and Spring Cottage, which is fed from the east via a series of ditches adjacent to the highway. This ditch is culverted (pipe diameter approximately 225mm) to the side of the property and at the back of the homeowner's garden turns right. It is likely it flows along the back of other properties on Winsor Road before flowing into Burnards Copse and eventually into Bartley Water. The homeowner is aware of their riparian responsibilities and proactively manages the ditch in front of and to the side of their property. They moved into the property in March 2017 and advised that they have already carried out maintenance to the system directly through the property but advised that work to dig out the short section of ditch on the Highway boundary was outstanding.
- 2 Along Winsor Road there are a number of gullies, catchpits, manholes and weir kerbs, some of which were blocked with debris. There are also recorded soakaways on the north side, but these were not inspected at the time of the visit.
- 3 The ditch running alongside the south-east of Winsor Road is piped just before Brambledown Cottage, although HCC has no record of this pipe on their Highway Asset Management Register. The pipe is approximately 225mm in diameter and was heavily obstructed with leaves at the time. There is no record of historic flooding in the area. However, after the visit with Cllr Goodwin in April 2019, it is now understood a pipe runs through the grounds of Stanley Cottage from Winsor Road to the rear garden where it merges with another open watercourse. This second watercourse is assumed to be the system originating from Spring Cottage (item 1 above). The watercourse continues Southeast through farmland. See images 5,6 & 7 later in this report.
- 4 There appear to be multiple ditches running along the field boundaries from Winsor Road towards Burnards Copse. As these are on private land they were not investigated during the initial site visit. At the follow up site visit it was observed that there is a watercourse linking to item 3 above.
- 5 The ditches on the west of Pollards Moor Road were observed to be very overgrown, to the point where further investigation on site was challenging.
- 6 It is believed a pipe runs underneath Pollards Moor Road at this point into a catchpit outside Meadow View, where a further pipe leaves the chamber at 90 degrees heading north-west along Pollards Moor Road, under the footway outside the various residential properties. These pipes are not currently recorded on the HCC's Highway Asset Management Register. The pipes entering and exiting the chamber are approximately 300mm diameter and the system was flowing well.

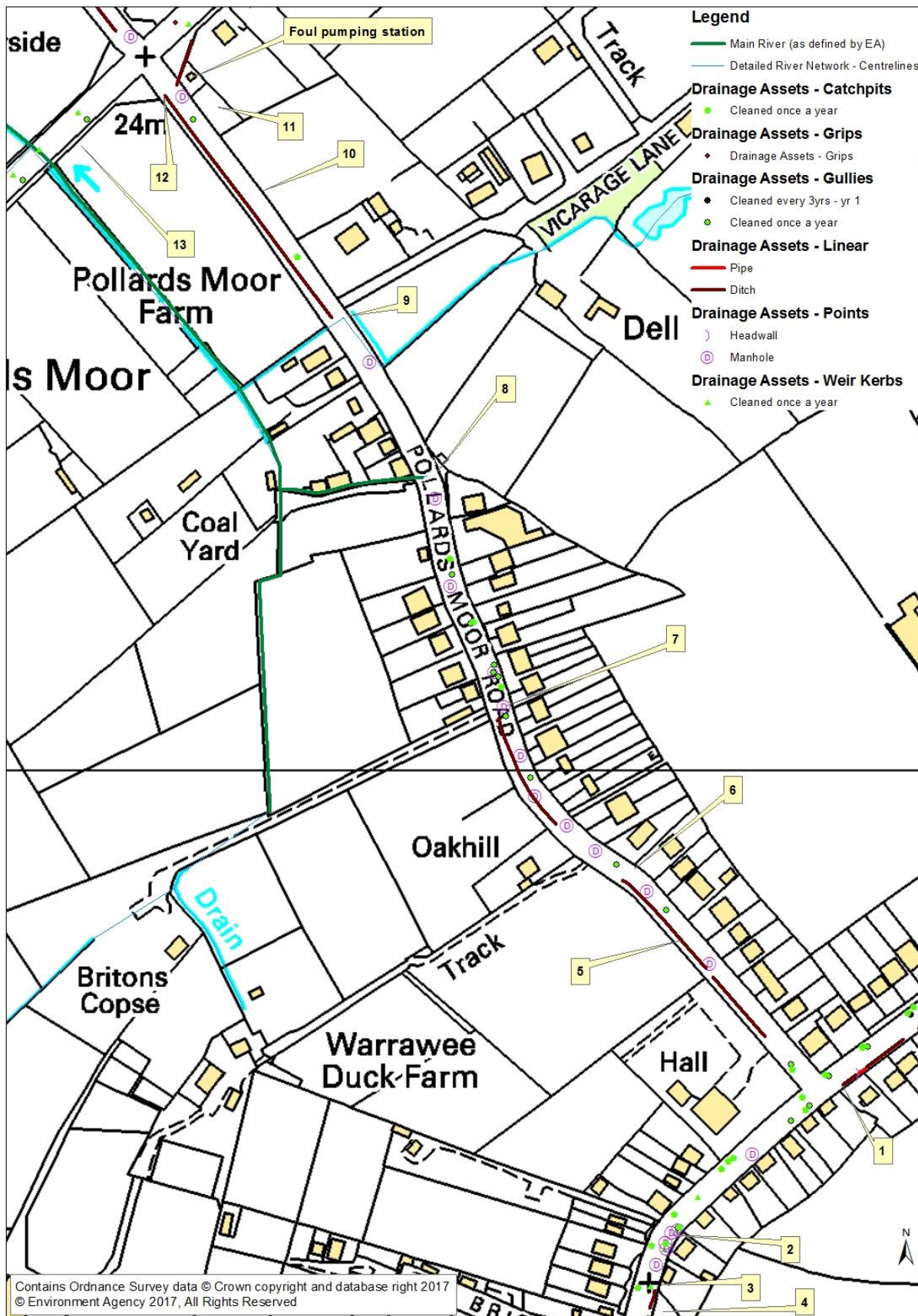


Figure 6: Site plan locating observation points

- 7 Some of the gullies in front of properties were covered in leaves and debris. It is believed they flow into the pipe beneath the footway. In looking at the general land levels adjacent to the highway, it is considered that there may have historically been a ditch section that has been filled in. This ditch would have in theory connected to the watercourse at point 8. There was some evidence of a narrow ditch outside Mavis Cottage.
- 8 At this location on the east side of Pollards Moor Road there is a concrete pipe from the adjacent land which was mostly submerged and leads to a short section of ditch to which the highway drainage system outfalls. It was not possible to ascertain the origin of the watercourse system from the private land and it does not appear to be documented on HCC's Highway Asset Management Register. It was evident that the highway outfall for the system from the south-east was obstructed by what is assumed to be a timber plank used to hold back the bank. It was also noted that the highway outfall joined the ditch at 90 degrees rather than 45 degrees which could impede flows. The ditch then connects to the culvert under Pollards Moor Road and to the watercourse on the opposite side. It was also observed that the watercourse on the west side outfall of the culvert needed clearing as it was holding back water in the culvert and was two thirds full.
- 9 There is a culvert running under Pollards Moor Road at this point, with the trench reinstatement still visible from the works done in 2014-15 where a new gully and a footway yard gully were installed by HCC. This carries the water that runs south of Vicarage Lane towards the Main River. The OS map suggests there is a watercourse/ditch which runs at one stage parallel to the road however this was not observed on site and may have been piped by the landowner. The new homeowner of Paddock View confirmed that a pipe had been partially constructed along the boundary of Paddock View to channel this water from the highway and the ditch north of Paddock View, but had to be halted due to the presence of tree roots. The entry to this approximately 300mm pipe is partially obscured. The homeowner also advised that Pollards Moor Farm fields, specifically the fields between the Main River and Pollards Moor Road, had been filled with around 2,000 lorry loads of soil to raise the land level in 2006. At the same time, a culvert was constructed for the Main River, however this did not have significant capacity and a flood occurred after installation. The culvert was removed and an open watercourse reinstated. See section 2.3 of this report for more detail. There are also ditches either side of Vicarage Lane however it was not possible to identify any culverts or outfalls where it met the junction with Pollards Moor Road.
- 10 There are a number of telegraph poles running along what is understood to be the route of the pipe between Vicarage Lane and the foul pumping station on the north-east side of Pollards Moor Road. It is anticipated the pipe could be severed from the telegraph poles, and there was evidence that the surrounding footway had subsided. It is assumed as with other sections of Pollards Moor Road that this was

a historic ditch that has been piped to permit the construction of the footway. There was only one gully evident and due to the condition of the verge on that side it is unlikely to be very effective. This therefore means that there is only one weir kerb nearer the foul pumping station taking surface water off the highway.

11 This field was full of standing water, however did not appear to be a formally designated area for holding water. It did not have much capacity left, and there had not been a significant period of rainfall leading up to the time of the site assessment. It was estimated that there was around 250mm of boundary support to hold back the standing water before it would overtop and run into Pollards Moor Road.

12 There is a culvert at this point running under Pollards Moor Road which is not recorded on HCC's Asset Management Register. This culvert was running at about half capacity after a number of dry days, flowing east to west. Trees obstruct the outflow of this culvert.

13 The outflow of the culvert runs into an (unrecorded) ditch system running parallel to Romsey Road, eventually joining the Main River. The Main River runs under Romsey Road via a box culvert (approximately 1200mm wide, 700mm high). A further culvert takes the Main River north-west under Newbridge Road, joining a further Main River before running via an approximately 1050mm culvert under the M27 towards the Cadnam River. These were not checked at the time of the visit. It is understood this culvert has a trash screen and the area may also host an EA monitoring station.

4. Assessment of Flood Risk

A review of the flood mechanisms and extents, and analysis of potential options to reduce the impact of future flooding has been undertaken.

It should be noted that whilst Pollards Moor Road was the principal area for the investigation, Winsor Road was also included in the initial site visit. For more information on flood risk in this area, a separate report covering Bartley Water has also been produced.

4.1. Analysis of information

Along Pollards Moor Road, the adjacent properties are generally lower than the road and there is a back fall towards them. Possibly due to its rural setting, there is no kerb line along the length of the road and it is evident that the verge edge has been significantly eroded by passing traffic. This erosion and lack of kerbing would impact on the flow of water reaching the highway gullies. That said the impermeable highway run-off is likely to be low in volume and would not contribute significantly to flooding

issues. The ditches on the west side were primarily there to manage run-off from the adjacent fields.

The Main River system taking the water from Pollards Moor Road is remote from the road itself and the vast majority of properties, the exception to this being the section on the boundary of 'Mulberry Cottage'. Therefore it is not so much that the Main River is the concern to properties but that the connecting ordinary watercourses, culverts and ditches need to be kept clear to ensure the water is able to discharge away from properties and the highway in the event of heavy prolonged rainfall.

There is limited detailed information as to the degree of property damage attributed to various flood events with particular reference to Pollards Moor Road itself. Whilst there are records from other sources of flooding in the area in 2000 and 2013, according to the local highway maintenance team Pollards Moor Road itself has not experienced regular flooding in recent years. Other records of flooding may exist, for example in planning files and personal records of flooding held by residents. Figures 3 and 5 in this report show the potential and historic areas of flooding and it is based on this information that the assessment has been made. From information gathered thus far, there have been records of a few mainly external property flooding incidents (i.e. garden or garage) and one instance of internal dampness to a property.

In the case of Figure 5, the extent of historic flooding plotted does not appear to show much flooding to private gardens which are lower than the road in this area. Equally the footprint of the flooding indicated would suggest it was flooding in line with 'Lydney' which is uphill and unlikely to have reached this point without significant property flooding further down. It is suggested that HCC's Asset Management Register be reviewed.

Figure 3 suggests there is a narrow concentration of surface water flooding risk to the rear of the timber yard and Tree Tops. This would back up the theory that there is a watercourse at this location which then connects to the pipe situated between Tree Tops and the electricity substation and serves to manage the flow away from those properties, eventually connecting to the main river. The pipe observed at this location is of unknown length, is approximately 450mm in diameter and was mostly submerged at the time of the visit. There is a well-established tree alongside which may have been a contributory factor to the depth of water retained in the pipe at the time of the site visit.

During the site visit a resident advised that "the landowner" installed a pipe from the roadside ditch on the west of Pollards Moor Road, west along the edge of "Paddock View" with the intent of linking it to the Main River. However, apparently due to a well-established oak tree the pipe route had to be aborted and at the time of the initial site visit the link is incomplete. As a result, the resident was deliberately blocking the entrance to the pipe to ensure there was no flooding further down the route of the pipe. It was not mentioned when the pipe was installed, and it is assumed that this may

have actually been a ditch previously. The resident who shared this information had only recently moved to the area and was not living at the property when this work occurred.

4.2. Potential Actions

Actions may only be considered further if there is sufficient budget available and the cost-benefit ratio is deemed favourable.

Action	Description	Potential Lead
Investigation or Survey	Follow up investigation of the pipe at the side of 'Paddock View' as it appears to be an incomplete watercourse route.	HCC
	Identify if the suspected watercourse exists at rear of timber yard and the capacity issue in the pipe alongside 'Tree Tops' that is its likely outfall source.	HCC with Parish Council
	Further assessment is needed to determine if the installation of more gullies local to 'Sunny Haven' and 'Meadow View' would reduce the potential for carriageway surface water to flow into their gardens.	HCC Highway Authority
	A detailed site survey could be undertaken to check/record the watercourses of the area on private land through to the culvert under the M27. This information should be added to HCC's Asset Management Register.	HCC
	Confirm catchment area taken by Main River in relation to culvert sizes.	
	Should a full study of all critical culverts/watercourses be undertaken, this information should be passed by HCC to those parties deemed responsible for their maintenance. This is in order that the responsible party is firstly made aware and secondly, that the importance of their regular maintenance is stated. It may be more practical that a plan be provided to the Parish Council so that (subject to data protection constraints) informal checks can be carried out and if necessary the Parish could suggest to the landowner if work was needed. If following this approach it is found maintenance was not being done it could then be escalated to either HCC or the Environment Agency as necessary.	HCC working with EA HCC with Parish Council and riparian landowners

Maintenance	Clear blockage to highway drainage outfall adjacent to 'Tree Tops' by local area highways team. Possible direction change of outfall to ditch from 90 degrees to 45. The local area highways team advised they would commission a CCTV survey of the highway system along Pollards Moor Road, particularly as it is suspected that at least five telegraph poles may have been installed through the carrier pipe between Vicarage Lane and Romsey Road.	HCC Highway Authority HCC Highway Authority
Minor Works	Subject to consultation with the local area highways team and the Parish, installation/completion of a new kerb line along the east side of Pollards Moor Road would assist with directing highway surface water to gullies and reduce flow to residential frontages.	HCC Highway Authority
Riparian Landowners	There was evidence of some need to clear ditches along Pollards Moor Road which is being looked at by the local area highway team although this is actually a riparian landowner responsibility. Discuss with landowner(s) and identify and reinstate or form new means to discharge or adequately attenuate standing water from the field adjacent to the foul pumping station into the ditch network on the opposite side of Pollards Moor Road in order to protect both the highway and foul pumping station. It was not clear from historical information but from observations of land depressions during the site visit, there was possibly a ditch line that ran from Ambleside to Mavis Cottage that connected to the watercourse alongside Mulberry Cottage but has been lost over time. A section appears to have been recut at the front of Mavis Cottage but it is formed more as a slot than a ditch. It may be necessary therefore to reinstate this ditch line throughout its length to protect property frontages in the future from surface water and direct it to the appropriate watercourse outfall.	HCC to liaise with riparian landowners HCC to liaise with riparian landowners HCC to liaise with riparian landowners

5. Conclusions and Next Steps

Previous information, site visit details and local accounts have been collated within this report in order to provide an assessment of the current flooding mechanisms

operating in Copythorne village. These have been used to identify if there are any potential options to mitigate flood risk. Whilst engineered options have been identified, the estimated level of costs and potential benefits are likely to be such that this would preclude the ability to secure funding from the national capital funding mechanisms.

This does not remove the potential to use other measures to reduce flood risk; improve the current drainage systems or investigate other funding sources to develop a scheme in this location. Costs for capital flood mitigation schemes tend to be relatively high and as such, external funding is usually required to implement schemes.

The most common source of funding is via the Flood Defence Grant in Aid (FDGiA) funding source which is provided by Central Government and managed by the EA. To access this funding, an analysis of the costs and benefits must be undertaken to demonstrate that there is value in undertaking works based on national criteria. There are different criteria used to assess the value (or benefits) of a scheme. The cost benefit ratio is then assessed against all other schemes put forward nationally with funding going to those giving the greatest benefits vs cost.

The highest level of benefit is directly related to internal residential property flooding (this does not include garages or outbuildings) and in Copythorne village, HCC have records of only one property suffering from internal flooding (damp only) in 2000-01. It should be noted this flooding was not reported to have re-occurred in 2013-14 when there was highway flooding in the area. Flooding has affected properties in the Riverside area since 2013-14.

Next Step	Description	Lead
Surveying and record keeping of existing surface water drainage system	CCTV the surface water drainage system along the length of Pollards Moor Road to ensure HCC records are up to date, and identify any issues	Hampshire Highways
Maintenance of existing surface water drainage system	Once records have been updated, review existing routine maintenance programme	Hampshire Highways
Review flood action plan for the village	Following the improvement in understanding of the drainage assets in the area, update the village flood action plan to ensure these are taken into account	Copythorne Parish Council with support from HCC
Identify actionable engineering and non-engineering options from this report	Discuss with the Parish Council and EA the potential to take forward any identified options	HCC, EA, Copythorne Parish Council

6. Appendix A - Photographs of the area



Image 1: Example of current highway drainage on Pollards Moor Road impacted by detritus (Jan 2018)



Image 2: Telegraph pole along line of surface water drainage system, east side of Pollards Moor Road at the north end, past Vicarage Lane, facing south-east (Jan 2018)



Image 3: Start of Main River from Pollards Moor Road, facing west (Jan 2018)



Image 4: Outfall of drainage system (suspected previous ditch) on east of Pollards Moor Road, flowing into watercourse that becomes Main River, facing south-east (Jan 2018)



Image 5 : Pipe system under Stanley Cottage, Windsor Road, which joins the open watercourse thought to originate from Spring Cottage (April 2019)



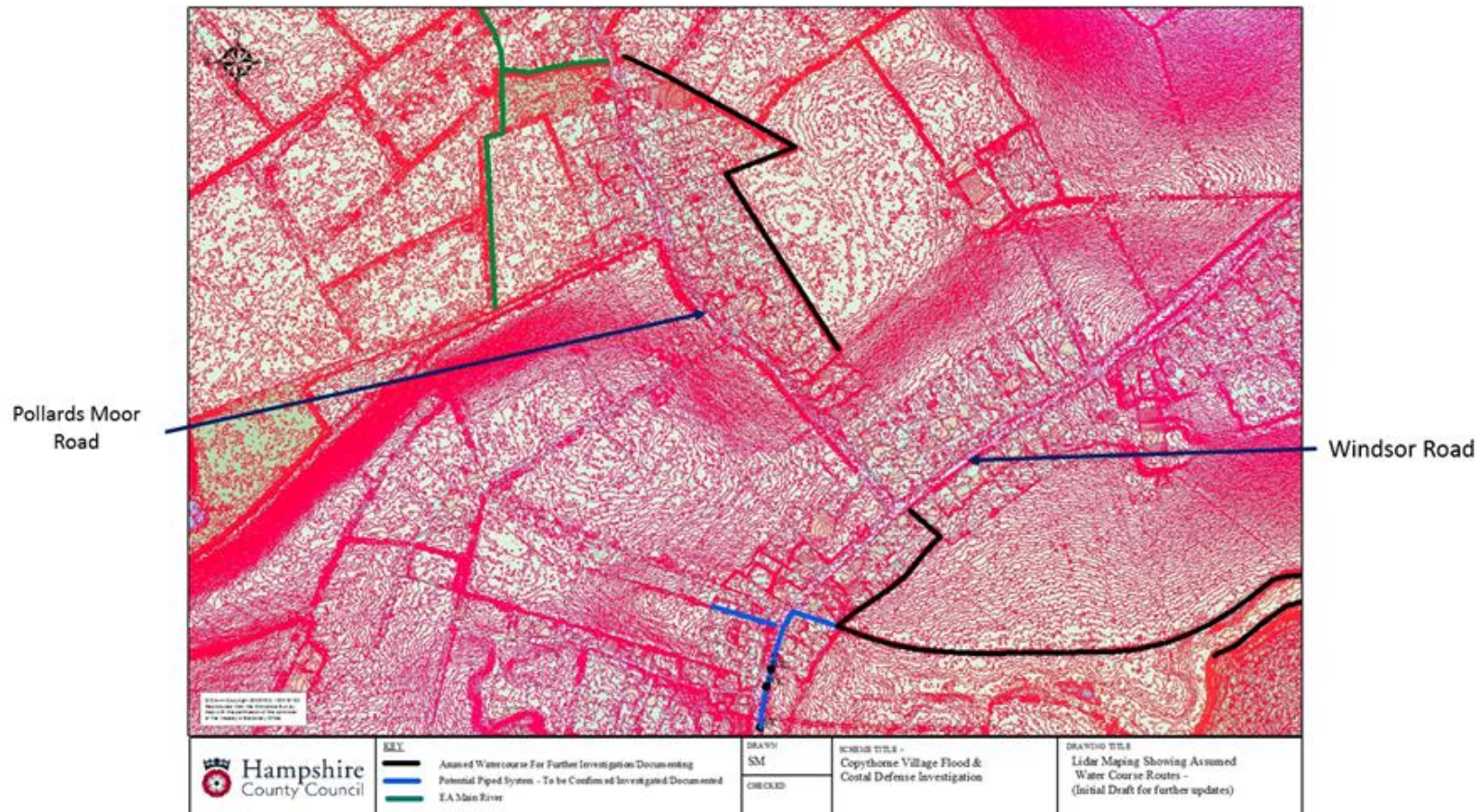
Image 6: Watercourse at the back of Stanley Cottage, Windsor Road. (April 2019)



Image 7 : Open Watercourse flowing towards the rear of Stanley Cottage, Windsor Road, thought to originate from Spring Cottage (April 2019)

7. Appendix B – Lidar Map of the area

- Assumed watercourse for further investigation/documentation
- Potential piped system – to be confirmed/investigated/documentated
- EA Main River



Copythorne Parish Council - Flooding AC Meeting – February 17th 2022

Item 5 – Discussion of the HCC F&WM Team Bartley Flood Investigation Report

BACKGROUND

On Friday August 6th 2021, Cllrs. Chillcott and Wiggins along with David Rigby (Parish Clerk) met with Tom Callaway of the HCC Flood and Water Management Team to assist him in preparing a Flood Investigation Report related specifically to Bartley Water.

That report was received on November 17th 2021 and a copy is attached as an appendix

CURRENT POSITION

Cllr. Graham Chillcott (as Chair of the Flooding Advisory Committee) and myself having looked through the report have already noted the following observations. Individual members of the Flooding Advisory Committee may well have others they wish to bring to the attention of other members.

Initial Observations: -

- 1) Page ii Executive Summary – First Bullet Point
Is stating just Shepherds Road too narrow, should Chinham Road (and maybe others) be mentioned
- 2) Page ii – Executive Summary – Second Bullet Point
Whilst strictly true in terms of Environment Agency description I am not sure that locals ever refer to the stretch of Bartley Water in the Parish as the “Fletchwood Tributary”.
- 3) Page 1 – Background
Add “by the Environment Agency” after the word “locally”.
- 4) Page 6 – Continuation of “What actions have been taken to address flood risk” – Top paragraph
Whilst the Parish Council minutes of February 26th 2013 refer to correspondence, they do not make the statement indicated.
- 5) Page 6 – Summary of observations and discussions – Point 8
Since the August 6th 2021 visit it has been confirmed that the attenuation area was never constructed.
- 6) Page 7 -Continuation of Summary of observations and discussions – Point 10
Change “may” to “have”?
- 7) Page 7 - Continuation of Summary of observations and discussions – Point 15
Change “towards the river Test” to “eventually into the River Test at Eling”.
- 8) Page 9-10 – Conclusions and Next Steps
Should an additional next step be to continue pressing the Environment Agency to ensure that the initial investigation works referred to in the final paragraph of Section 2 of this report be progressed?

ACTION REQUIRED

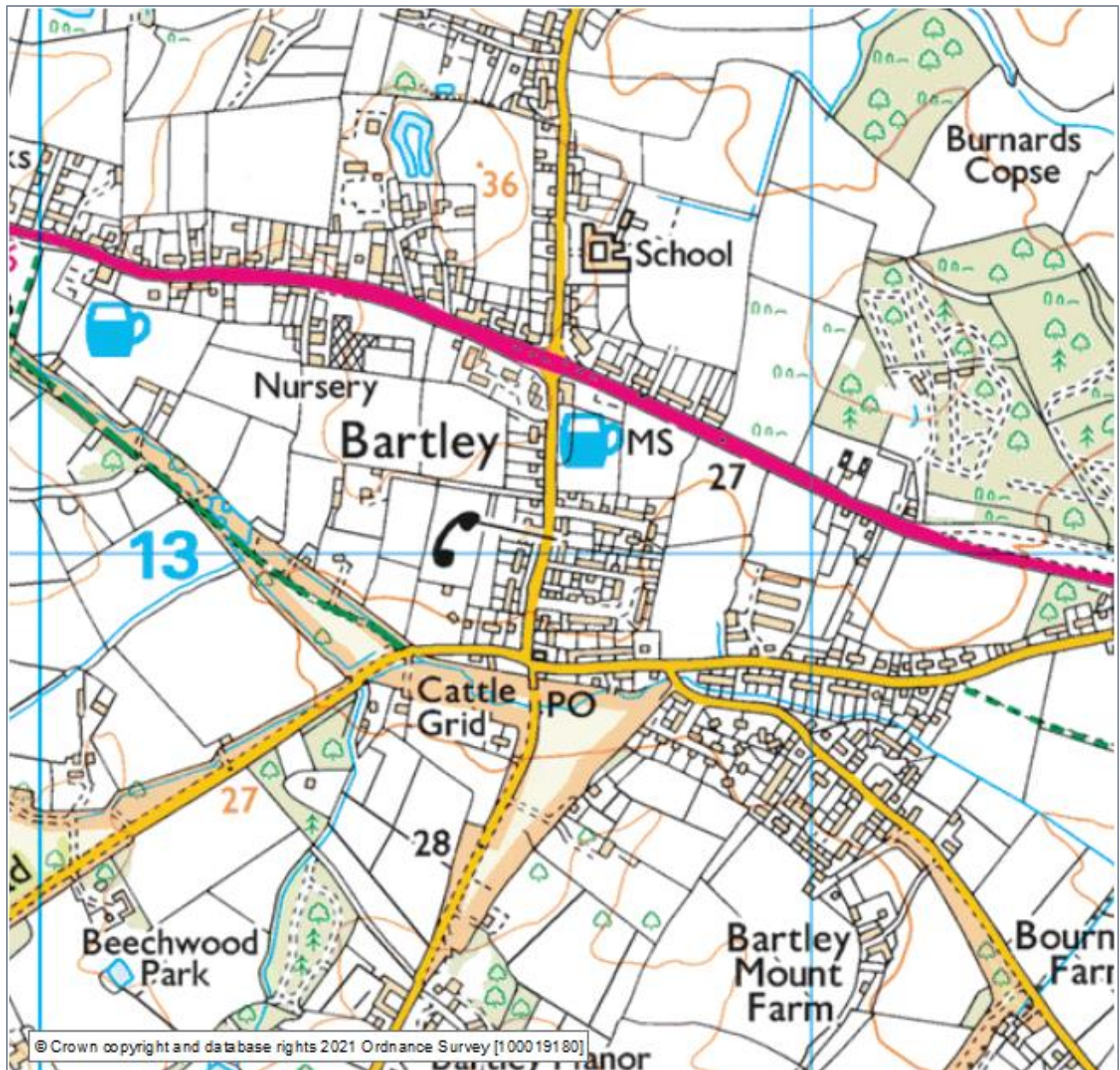
Members of the Flooding Advisory Committee are asked to consider the report; decide on the comments to be sent to the HCC F&WM Team in response; and obtain Council’s approval to send them.

David Rigby
Clerk to Copythorne Parish Council
February 4th 2022

Copythorne South - Bartley Water

Addendum to Copythorne Village Flood Risk Investigation Report

October 2021



Notice

This Document and its contents have been prepared by and for use solely by Hampshire County Council. Hampshire County Council assumes no responsibility to any other party in respect of or arising out of or in connection with this document and/ or its contents.

The purpose of this report is to provide information on the current risk of flooding and to suggest options that may be used to mitigate flood risk at this location based on the current evidence.

Hampshire County Council Flood & Water Management

<https://www.hants.gov.uk/landplanningandenvironment/environment/flooding>

Revision	Purpose Description	Prepared by	Checked by	Approved by
1	Draft Internal Review	PGC/JP	TC	VW
	Final	PGC/JP	TC	VW

Executive Summary

- This investigation of Bartley Water has been undertaken by Hampshire County Council as the Lead Local Flood Authority to understand previous flooding events, and relevant historic occurrences, review actions taken since 2013-14; and consider what, if any, further actions may be required to address residual flood risk. The focus has been on Shepherds Road and the surrounding area.
- Bartley in the New Forest has the Fletchwood Tributary, classed as 'Main River' flowing along Shepherds Road in the catchment of Bartley Water.

The purpose of this report is to:

- Understand the current information available and formalise this within a single report
- Clarify the flood risk of the area
- Understand what works have been undertaken within the area
- Provide an overview of the flooding mechanism and impacts of any flooding
- Identify potential affordable engineering and non-engineering options that could reduce, or better manage, flood risk in the area

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1. Background

Bartley is a village located in the parish of Copythorne, approximately 5.5km west of Totton, in the New Forest district (see Figure 1). The village is situated around and south of the A336 and its amenities include a village hall in the former tin church, a junior school, pub and a village shop and post office. The principal local watercourse is a tributary of the Bartley Water south of Southampton Road, which is categorised as a 'Main River'¹ east of Brockishill Road. It is understood this watercourse is known locally as the 'Fletchwood tributary'. The geology of the area comprises of variable deposits of sands and gravels.

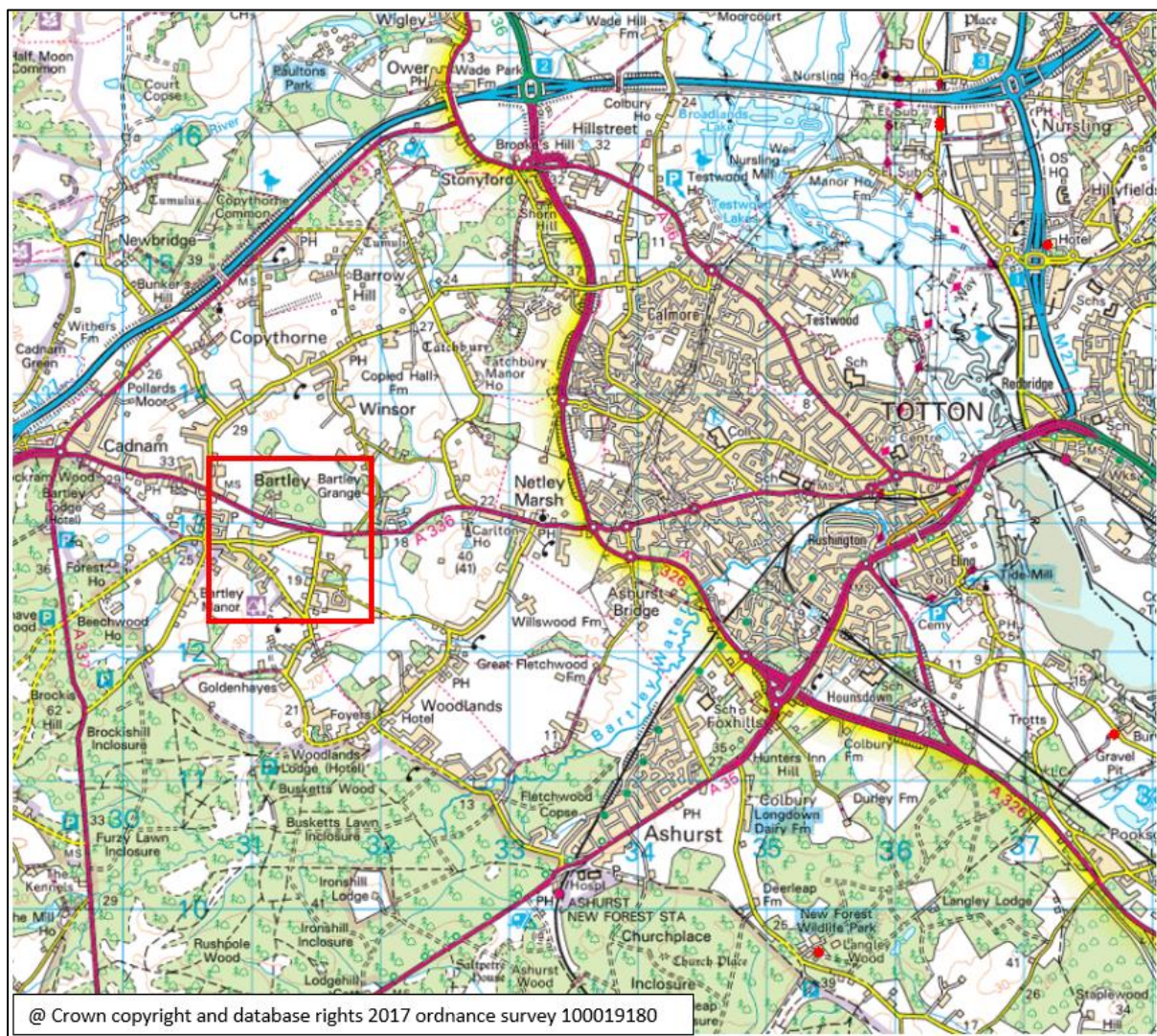


Figure 1: Bartley location plan

¹ A Main River is typically a larger stream or river, but can be a smaller watercourse of local significant. Main Rivers are nationally identified and managed by the Environment Agency

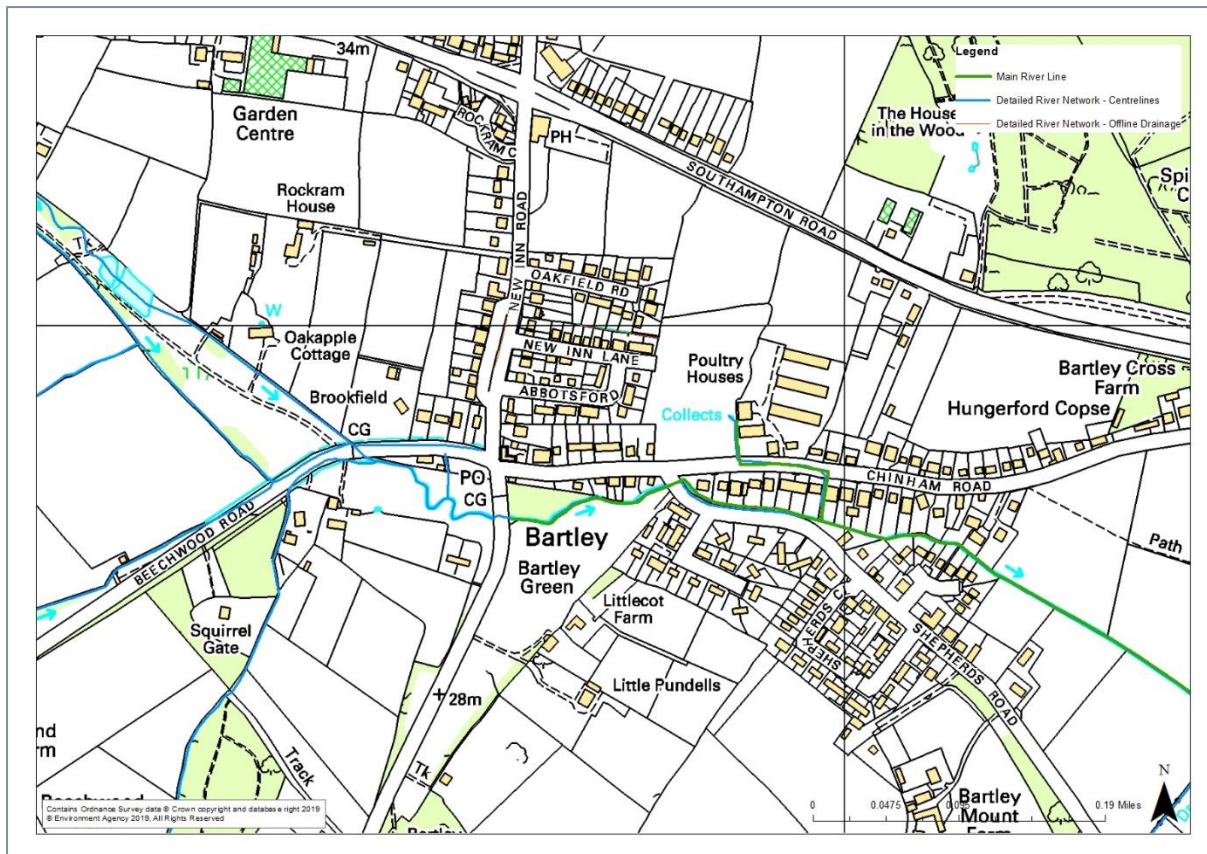


Figure 2: Map of Bartley village showing the 'Fletcher tributary' (Main River) and local river network – the watercourse becomes Main River to the east of Brockishill Road, at Bartley Green.

1.1. What is the flood risk in Bartley village?

The Environment Agency (EA) produce mapping which illustrates the potential fluvial and surface water flood risk.

Bartley village, according to EA mapping, is at risk from fluvial flooding and surface water flooding. The risk areas broadly follow existing watercourses, including the Main River line. Figure 3 details the risk of fluvial flooding for Bartley using EA data. Flood Zone 3 refers in this instance to a 1% probability of flooding from rivers each year. Flood Zone 2 in this instance refers to a 0.1-1% probability of flooding from rivers each year.

Figure 4 details the surface water flood risk for Bartley village using EA data. High risk refers to an area with a probability of flooding greater than 1 in 30 in any given year, medium risk between 1 in 100 and 1 in 30, and low risk less than 1 in 100 probability of flooding in any given year.

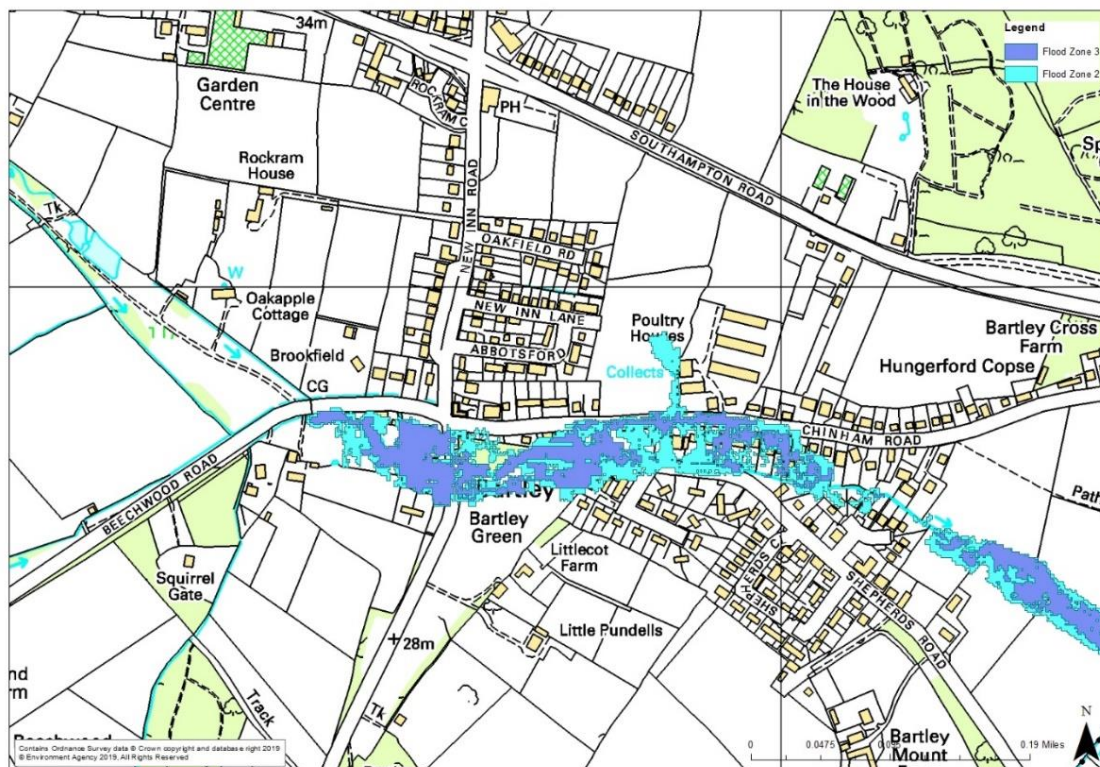


Figure 3: Fluvial flood map for Bartley village

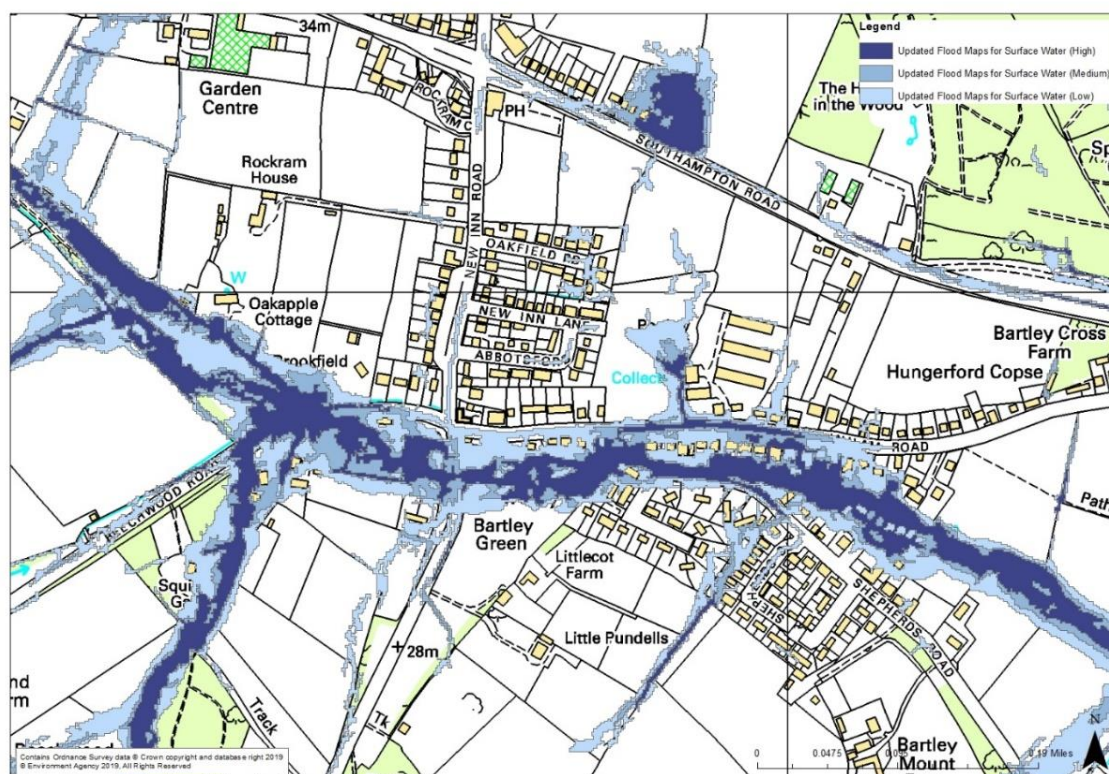


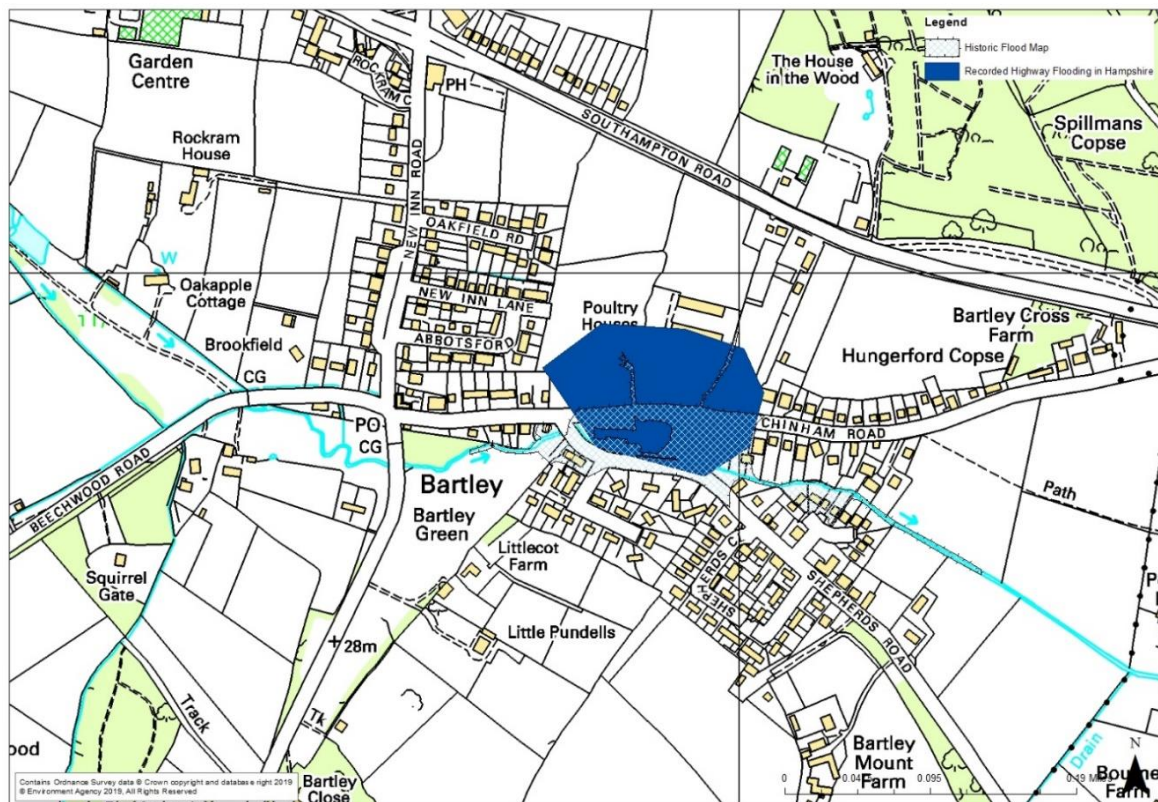
Figure 4: Surface water flood map for Bartley village

1.2. What flooding has taken place in Bartley village?

Bartley Water, which has a number of tributaries in the Cadnam and Copythorne area, flows directly through Bartley village centre, and becomes a Main River in Bartley. In 2000-01, 11 properties in Bartley suffered from flooding, and work has been undertaken since then to reduce the flood risk. New Forest District Council completed drainage works in 1999 and 2004 which are reported to have helped reduce the risk of flooding in this location.

One report has been produced by Halcrow Group Ltd. on behalf of the Environment Agency (EA) covering the 2000-2001 flood event in the area:

- Winter 2000-2001 Flooding in Hampshire – Bartley, Cadnam, Copythorne, Ower and Winsor (August 2002)



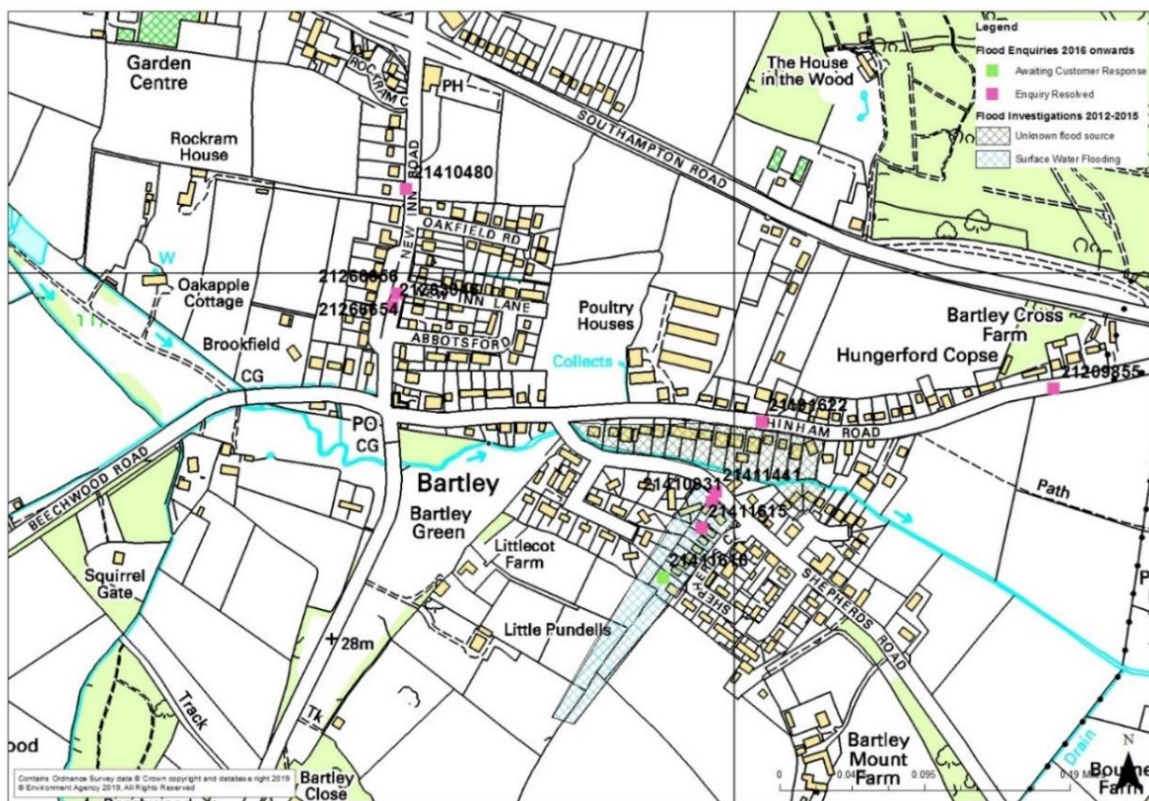


Figure 5: Flooding records held by Hampshire County Council for Bartley,

2. What actions have been taken to address flood risk?

There are records of a proposed 'Bartley Flood Relief Scheme' from 2006, which it is understood both the District Council and Environment Agency contributed to, however details on the scheme are limited. The project appraisal report from 2005 states that 11 properties have been affected by internal flooding. The source of the problem was recorded as being the increased constriction of the watercourse downstream of Shepherds Road, causing water to exceed the capacity of the channel upstream of Shepherds Road after heavy rainfall and flow via the road to Riverside Close. The preferred option for resolving the flooding issue was attenuation storage on open land upstream.

It appears a significant amount of research was undertaken by the District Council, but no formal scheme was agreed and since the change in responsibilities with regards to flooding, following the implementation of the Flood and Water Management Act, the District Council have no records of this work. The Environment Agency has confirmed Bartley is on their list of potential areas for future work, but there are no formal plans as yet.

The Parish Council highlighted the work completed on the Bartley Flood Alleviation Scheme and have previously been in discussion with the EA on the topic. The scheme

was considered by the Parish Council for the Flood Resilience Community Pathfinder Scheme, run by Defra, but minutes from the 26 February 2013 Parish Council meeting refer to correspondence between the Parish Council and New Forest District Council regarding the Flood Alleviation Scheme, confirming it was unlikely to meet the criteria for Defra funding in this instance.

The Environment Agency has confirmed that Bartley is on the current 2021-27 programme for potential funding from DEFRA, however initial investigative works are not proposed until 2024, and are dependent on a cost-benefit analysis ranked against other projects. Risk management authorities can bid for Grant in Aid funding if the project can meet the cost-benefit criteria.

3. Site assessment

The site visit was undertaken by representatives of Hampshire County Council and Copythorne Parish Council on the afternoon of Friday 6th August 2021, in dry weather. The site visit included a review of parts of Winsor Road, New Inn Road, Beechwood Road, Chinham Road, Shepherds Road and Riverside Close.

The following observations relate to the time of the visit only and this report acknowledges that changes to the state of the land and assets referenced can occur at any time. Observations were made from publicly accessible points only (such as the highway or a public right of way) and as such there may be some gaps or assumptions made.

Summary of observations and discussions

- 1 The ordinary watercourse at Stanley Cottage, Winsor Road, is assumed to flow toward the timber yard on Ringwood Road.
- 2 Surface water flows down towards Winsor Road from The Brickyard.
- 3 There are issues with highway gullies not draining effectively on Winsor Road, particularly the gully outside The Wilderness.
- 4 Water is known to seep from the verge by Chipmans House, Winsor Road.
- 5 The bus stop on New Inn Road opposite The Haywain PH is known to flood. There is a ditch (ordinary watercourse) between the footpath and Rockram Close properties at this location.
- 6 There are ditches and culverts (ordinary watercourses) on both sides of New Inn Road, the condition of the watercourses vary significantly along the length of this road.
- 7 There is a potential flooding issue at the southern end of New Inn Road adjacent to the post office, where the piped system crosses the road at a restrictive angle.
- 8 An attenuation area at the junction of Beechwood Road and Green Lane may need reconstructing as the bunding level has sunk, however there is no flooding occurring at this location as water finds its way into the ditch network.

- 9 Highway work has been ongoing near to Yew Tree Garage, Southampton Road. Water from this location may drain through the ditch system towards Bartley Water.
- 10 Bartley Water is the main river, classified as such from where it passes under Brockshill Road. The watercourse flows through the rear gardens of the Chinham Road properties east of Shepherds Road, some of the property owners may have received funding to assist with reducing the risk of flooding.
- 11 A historic flooding issue at the culvert beneath Shepherds Road was resolved by replacing the single small culvert with three larger diameter culverts.
- 12 There is a land drainage issue at White Oaks, Shepherds Lane and possibly the properties behind in Shepherds Close. Flooding was last recorded when the culvert blocked and flooded through the garage at White Oaks in February 2019.
- 13 Fluvial flooding has historically affected the low-lying gardens in Riverside Close, however flood water can also arrive at this location via the highway when the main river channel capacity is exceeded upstream of Shepherds Road.
- 14 Ditches (ordinary watercourse) and highway drainage assets along Shepherds Road are assumed to drain to the main river. The condition of the ordinary watercourses and highway drainage assets varies.
- 15 Downstream of this location, Bartley Water flows through Netley Marsh parish and towards the River Test.

4. Assessment of Flood Risk

A review of the flood mechanisms and extents, and analysis of potential options to reduce the impact of future flooding has been undertaken.

4.1. Analysis of information

To reduce the risk of flooding, the existing drainage systems in Bartley must be fully operational and well-maintained.

- Main rivers are watercourses that are assessed to have a significant flood risk due to their size or local constraints, and may include ditches and culverts. The riparian owner (a landowner with main river running through or adjacent to their land) has a responsibility to maintain the watercourse so that it does not impede the flow of water. Any works in the immediate vicinity of a main river require a flood risk activity permit from the Environment Agency. Enforcement action can be taken by the Environment Agency if main rivers are not maintained or are affected by works undertaken without the necessary permit. The Environment Agency may also have a schedule of maintenance activities.
- Ordinary watercourses are watercourses that have not been designated as main river by the Environment Agency, and may include ditches and culverts. The riparian owner (a landowner with an ordinary watercourse running through or adjacent to their land) has a responsibility to maintain the watercourse so

that it does not impede the flow of water. Any works that would affect the flow of water (such as culverting for driveway access) require consent from the lead local flood authority, Hampshire County Council. Enforcement action can be taken by Hampshire County Council if ordinary watercourses are not maintained or are affected by works undertaken without the necessary consent. Problems with ordinary watercourses can be reported to Hampshire County Council online.

- Highway drainage systems are installed and maintained by the highway authority, Hampshire County Council. These systems often depend on ordinary watercourses and main rivers as discharge points. A lack of maintenance in watercourses can obstruct the outlets from highway drainage systems, resulting in blockages. Problems with highway drainage assets can be reported to Hampshire County Council online.
- There are no public surface water sewers maintainable by Southern Water at this location.

Other pressures on existing drainage systems may include high groundwater, which can enter piped drainage systems (including foul sewers) through damaged infrastructure, and private surface water drainage systems associated with the historic and current development of private property.

Figures 3 & 4 highlight the flood risk from the watercourses in the area. The surface water flood map tends to highlight more of the ordinary watercourses due to the reliance on topography for modelling, and both maps show the significance of the flood risk from Bartley Water. Location specific advice for reducing flood risk is provided in the following section.

4.2. Responsibilities and Potential Actions

There are existing responsibilities to ensure that land drainage and highway drainage systems are suitably maintained.

All riparian landowners have a responsibility to maintain their watercourse. It is not unusual for riparian landowners to be unaware of their responsibilities. A Parish Council-led riparian awareness campaign could be considered, with Hampshire County Council and Environment Agency support. Newsletter and website articles, targeted letter drops, and regular inspections may be appropriate. Awareness and use of the Hampshire County Council flood reporting system should also be promoted.

Key areas for a campaign would include both sides of the southern end of Winsor Road, both sides of New Inn Road, properties close to Bartley Water on Chinham Road, Shepherds Road and Riverside Close, properties on the western side of

Shepherds Close. Surveys of the watercourses and culverts may be appropriate in these areas with recurring flooding problems.

Hampshire County Council as the highway authority maintains highway drainage assets. Maintenance is most effective when the receiving watercourses are suitably maintained. Issues with highway drainage assets can be reported online. Not all watercourses and highway drainage assets are recorded. Site walkovers and surveys may help to identify features not already recorded, so that maintenance may be done by the responsible party.

The Environment Agency may wish to proceed with investigating flood risk in Bartley Water. Flood alleviation works may proceed as a result of any investigation, depending on whether the benefits of a proposed scheme will outweigh the costs.

5. Conclusions and Next Steps

It is recommended that a riparian landowner awareness campaign be undertaken, prioritising the areas known to have a higher flood risk. This can be undertaken any time of the year, however a regular reminder for maintenance in late summer every year would be beneficial as the bird-nesting season ends and wetter weather is expected. Groundwater levels may also rise sufficiently to have an impact on the drainage systems.

Problems with ditch or culvert maintenance on ordinary watercourses may be reported to Hampshire County Council here: [Report a flooding or drainage problem | Hampshire County Council \(hants.gov.uk\)](https://hants.gov.uk/report-a-flooding-or-drainage-problem). There is also an option to report highway drainage asset problems. Works to an ordinary watercourse will usually require ordinary watercourse consent, details on the application process can be found here: [Making changes to a watercourse | Hampshire County Council \(hants.gov.uk\)](https://hants.gov.uk/making-changes-to-a-watercourse).

Problems with main river maintenance may be reported to the Environment Agency. Details on applying for a permit when working on or near a main river can be found here: [Flood risk activities: environmental permits - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/flood-risk-activities-environmental-permits).

Should any surveys be undertaken on drainage systems in this area, Hampshire County Council may wish to record the information on the highway drainage asset database or the flood risk asset register. Please contact Hampshire Highways or the Flood and Water Management team with any information.

Costs for capital flood mitigation schemes tend to be relatively high and as such, external funding is usually required to implement schemes.

The most common source of funding is via the Flood Defence Grant in Aid (FDGiA) funding source which is provided by Central Government and managed by the Environment Agency. To access this funding, an analysis of the costs and benefits must be undertaken to demonstrate that there is value in undertaking works based on

national criteria. There are different criteria used to assess the value (or benefits) of a scheme. The cost benefit ratio is then assessed against all other schemes put forward nationally with funding going to those giving the greatest benefits vs cost. The cost benefit score is difficult to determine at this stage as it cannot be confirmed to what level properties, businesses and infrastructure can be protected.

The better the standard of protection, the more benefit can be claimed. The highest level of benefit is directly related to internal residential property flooding (this does not include garages or outbuildings) and in Bartley, Hampshire County Council have records of eleven properties suffering from internal flooding in 2000-01.

Previous information, site visit details and local accounts have been collated within this report in order to provide an assessment of the current flooding mechanisms operating in Bartley. These have been used to identify if there are any potential options to mitigate flood risk. Whilst engineered options have been identified, the estimated level of costs and potential benefits are likely to be such that this would preclude the ability to secure funding from the national capital funding mechanisms.

This does not remove the potential to use other measures to reduce flood risk; improve the current drainage systems or investigate other funding sources to develop a scheme in this location.

Copythorne Parish Council – Flooding AC Meeting – February 17th 2021

Item 6 - Review of work programme for FAC for year ending April 2022

Action Number	Description	Task Owner	Start Date	End Date	Current Action	Notes
1	Consider way ahead on HCC Copythorne North Flood Report	All	July '21	Tba	Council response sent 16/12/21. HCC reply received 23/12/21	Item on agenda for Feb 2022 Flooding AC meeting.
2	Prepare new Parish Flood Plan for 2022	Cllr. Wiggins	Jan '22	Tba	N/A at this time	2022 review to start Q1 2022
3	Preparation of Schedule of Works & Monitoring of Works on Flood Mitigation by Lengthsman	Cllr. Wiggins	Jun '21	Tba	1 st 2021/22 tasks issued 11/6/21 and completed by end Oct 2021	See latest attached schedule
4	Monitor works being undertaken by Authorities in Inspecting Main Rivers and Critical Watercourses	Clerk	Nov '21	Tba	Clerk to contact EA & HA to obtain details of their inspection regimes and report to Council	EA e-mail 5/3/21 refers HE e-mail 1/3/21 refers
5	Investigate historical flooding in Old Romsey Road	Cllr. Lady Kara	July '21	Tba	To research the history of the problem	Culvert under M27 behind Sir John Barleycorn photo taken by Cllr. Chillcott and distributed to Cllrs by the Clerk. Research continues
6	Investigate Pollards Moor Road, Electric Poles blocking drainage	Clerk	July '21	Tba	To research the history of the problem and hopefully come to a resolution	First reported 25 years ago. Site visit 2/1/21 with SSE. JG Mtg with SSE 24/1/21. Subsequent investigation revealed missing pipe. Post Testing still to be conducted. JG liaising with SSE. JG has passed task to the Clerk
7	Investigate recent flooding issues in The Parade, Southampton Road area	Cllr. Chillcott to lead	Sep '21	Tba	Requests made of HCC Highways to deal with issues reported in respect of certain Highways assets.	Items listed on Clerks database. Site last visited by HCC contractors for further jetting on Jan 2022.
8	Respond to new Flooding issues in Parish as they arise	All	July '21	Tba	Watching brief	

9	Specific Drainage Issues	All	Jan' '21	Tba	Clerk to continue to monitor live events and report to Council	a. Shepherds Road drainage issue. Blockage cleared by resident Jan 22. (WATCHING BRIEF) b. New Inn Rd/Oakfield Rd ditch and broken pipe. (21481011). HCC Highways passed work to contractor on 29/4/21. Work started Feb 4/2/22 (progress delayed by location of other utilities). Listed on Clerk's tracker. c. New Inn Road/Rockram Close blocked ditch (21475318). Ditch cleared again April 2021. Suspect blocked pipe under Rockram Close. (WATCHING BRIEF) d. Barrow Hill Road, surface water flooding and drainage issues. RR letters sent out by HCC on 9/2/21. GC has spoken to Historic England re Barrows in paddock (WATCHING BRIEF) e. Pollards Moor Road electric poles. See under 6 above. f. Pollards Moor Road condition of verge at Romsey Road end, after Southern Water tanking exercise in early 2021 (21536412). Road surface repairs completed. Pavement re-widening work completed. Removal of debris requested 25/1/22 g. Riparian responsibilities letters issued and surface water flooding in Kewlake Lane (21534946) Works undertaken by HCC Highways contractors to jet drain which flows into ditch then field. (WATCHING BRIEF)
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Copythorne Parish Council – Flooding AC Meeting – February 17th 2022

Item 7 – Schedule of works on flood mitigation being undertaken by Lengthsman for 2021/22

Task Ref:	Action	Start Date	1 st Milestone	2 nd Milestone	Planned Finish	Actual Finish	Comments
1	Cut back all vegetation around the white railings repainted in 2020 (15 sets in 9 locations)	July 2021			By Sept 2021	Aug 2021	Part of rolling programme of maintenance.
2	White railings in Old Romsey Road (near Tackaberry Cottage) AND in Kewlake Lane (near Springers Farm House) Cut back vegetation to enable painting of metal barriers (total of 3 sets in 2 locations). Then paint, in white, the metal barriers.	July 2021			By mid Oct 2021	End Oct 2021	Vegetation removed from both sets of railings in Aug 2021. Old Romsey Road railings painted Kewlake Lane railings painted Oct 2021
3	Lengthsman to walk all the Main Watercourses and ditches along roads liable to surface water flooding in the Parish and clear or report to Clerk any obstructions found	Oct 2021			By end of Oct 2021	End Oct 2021	Checks in previous years for example have included Pound Lane, Barrow Hill Road, Shepherds Road, Brockishill Rd, Beechwood Rd and Bartley Green No issues of concern found
4	Kewlake Lane - Lengthsman to ensure that pipes from “pond” to ditch on opposite side of road and from roadside ditch to field are clear	Oct 2021			By end of Oct 2021	End Oct 2021	No issues (Note:- Clerk now checking minimum once a month when undertaking other parish tasks.
5	Consideration of additional “White railings” clearing and painting to be actioned during 2021/22	Feb 2022?					
6.	Consideration of other tasks	Feb 2022?					

Last updated – Clerk – January 31st 2022