

Product 4 (Detailed Flood Risk Data) for St. Clipen, High Street, Arlingham, GL2 7JN

Reference number: 218385

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Model Information

The following information and attached maps contain a summary of the modelled information relevant to the area of interest. The information provided is based on the best available data as of the date of issue.

Model Name	Release Date
Tidal Severn	2007
Tidal Severn Climate Change Re-run	2020

Flood Map for Planning (Rivers and Sea)

The Flood Map for Planning (Rivers and Sea) indicates the area at risk of flooding, **assuming no flood defences exist**, for a flood event with a 0.5% chance of occurring in any year for flooding from the sea, or a 1% chance of occurring in any year for fluvial (river) flooding (Flood Zone 3). It also shows the extent of the Extreme Flood Outlines (Flood Zone 2) which represents the extent of a flood event with a 0.1% chance of occurring in any year, or the highest recorded historic extent if greater. The Flood Zones refer to the land at risk of flooding and **do not** refer to individual properties. It is possible for properties to be built at a level above the floodplain but still fall within the risk area.

The Flood Map only indicates the extent and likelihood of flooding from rivers or the sea. It should also be remembered that flooding may occur from other sources such as surface water, sewers, road drainage, etc.

To find out which flood zone a location is in please use: <https://flood-map-for-planning.service.gov.uk/>

Definition of flood zones

- **Zone 1** - The area is within the lowest probability of flooding from rivers and the sea, where the chance of flooding in any one year is less than 0.1% (i.e. a 1000 to 1 chance).
- **Zone 2** - The area which falls between the extent of a flood with an annual probability of 0.1% (i.e. a 1000 to 1 chance) fluvial and tidal, or greatest recorded historic flood, whichever is greater, and the extent of a flood with an annual probability of 1% (i.e. a 100 to 1 chance) fluvial / 0.5% (i.e. a 200 to 1 chance) tidal. (Land shown in light blue on the Flood Map).
- **Zone 3** - The chance of flooding in any one year is greater than or equal to 1% (i.e. a 100 to 1 chance) for river flooding and greater than or equal to 0.5% (i.e. a 200 to 1 chance) for coastal and tidal flooding.

Note: The Flood Zones shown on the Flood Map for Planning (Rivers and Sea) do not take account of the possible impacts of climate change and consequent changes in the future probability of flooding. Reference should therefore also be made to the [Strategic Flood Risk Assessment](#) when considering location and potential future flood risks to developments and land uses.

Areas Benefitting From Defences

Where possible we show the areas that benefit from the flood defences, in the event of flooding:

- from rivers with a 1% (1 in 100) chance in any given year, or;
- from the sea with a 0.5% (1 in 200) chance in any given year.

If the defences were not there, these areas would flood. Please note that we do not show all areas that benefit from flood defences.

The associated Dataset is available here: <https://data.gov.uk/dataset/flood-map-for-planning-rivers-and-sea-areas-benefiting-from-defences>

Node Data / Modelled Levels

The node point map will show a selection of model node points near to your site. The tidal & fluvial levels for these node points are shown below.

Tidal Flood Levels (m AOD)

The modelled levels are given in m AOD (N), m AOD indicates metres Above Ordnance Datum (Newlyn).

The information is taken from the model referenced above and may not include the updated climate change figures.

Node Label	Easting	Northing	Annual Exceedance Probability - Maximum Water Levels (m AOD) (defended)									
			20% Fluvial, 1.33% Tidal	20% Fluvial, 1% Tidal	20% Fluvial, 0.5% Tidal	20% Fluvial, 0.5% inc. 20% increase in inflows	20% Fluvial, 0.1% Tidal	1.33% Fluvial, 50% Tidal	1% Fluvial, 50% Tidal	1% Fluvial, 50% Tidal inc. 20% increase in inflows	0.5% Fluvial, 50% Tidal	0.1% Fluvial, 50% Tidal
SEV30	372390	211622	10.67	10.69	10.71	10.80	10.78	10.41	10.42	10.63	10.45	10.51
SEV32	371594	212139	10.65	10.68	10.71	10.82	10.78	10.39	10.40	10.64	10.42	10.49
SEV34	371521	213097	10.62	10.65	10.69	10.81	10.76	10.37	10.38	10.63	10.40	10.46
SEV36	370597	213339	10.56	10.58	10.61	10.74	10.67	10.33	10.34	10.58	10.36	10.41
SEV38	369831	212691	10.51	10.53	10.57	10.72	10.65	10.26	10.27	10.54	10.29	10.33
SEV40	369401	211781	10.45	10.47	10.50	10.67	10.59	10.18	10.19	10.46	10.22	10.25
SEV42	368995	210788	10.36	10.39	10.45	10.63	10.53	10.07	10.09	10.41	10.11	10.18
SEV44	369232	209899	10.41	10.44	10.50	10.73	10.66	10.02	10.03	10.39	10.06	10.17
SEV46	369984	209368	10.41	10.45	10.51	10.74	10.67	10.02	10.02	10.39	10.04	10.13
SEV48	370946	209720	10.31	10.35	10.42	10.65	10.54	9.94	9.95	10.31	9.97	10.03
SEV50	371852	209462	10.29	10.32	10.40	10.67	10.54	9.86	9.87	10.23	9.90	9.96

Climate Change Scenarios – Maximum Water Levels (m AOD) (defended)										
Node Label	Easting	Northing	Fluvial 2020 HC	Tidal 2020 HC	Fluvial 2020 UE	Tidal 2020 UE	Fluvial 2040 HC	Tidal 2040 HC	Fluvial 2040 UE	Tidal 2040 UE
SEV30	372390	211622	10.33	10.67	10.35	10.68	10.35	10.71	10.37	10.72
SEV32	371594	212139	10.33	10.69	10.34	10.69	10.34	10.73	10.35	10.74
SEV34	371521	213097	10.31	10.68	10.32	10.68	10.32	10.72	10.34	10.73
SEV36	370597	213339	10.26	10.61	10.28	10.62	10.28	10.65	10.29	10.66
SEV38	369831	212691	10.20	10.58	10.21	10.58	10.21	10.64	10.22	10.65
SEV40	369401	211781	10.11	10.52	10.14	10.53	10.14	10.58	10.16	10.60
SEV42	368995	210788	10.00	10.46	10.02	10.47	10.02	10.53	10.05	10.55
SEV44	369232	209899	9.94	10.46	9.97	10.48	9.97	10.55	10.01	10.57
SEV46	369984	209368	9.91	10.48	9.94	10.50	9.94	10.55	9.98	10.60
SEV48	370946	209720	9.87	10.40	9.89	10.42	9.89	10.49	9.91	10.52
SEV50	371852	209462	9.83	10.37	9.84	10.39	9.84	10.48	9.87	10.51

Climate Change Scenarios – Maximum Water Levels (m AOD) (defended)										
Node Label	Easting	Northing	Fluvial 2070 HC	Tidal 2070 HC	Fluvial 2070 UE	Tidal 2070 UE	Fluvial 2125 HC	Tidal 2125 HC	Fluvial 2125 UE	Tidal 2125 UE
SEV30	372390	211622	10.36	10.77	10.41	1.80	10.36	11.08	10.41	11.34
SEV32	371594	212139	10.35	10.78	10.39	10.81	10.35	11.08	10.39	11.32
SEV34	371521	213097	10.33	10.78	10.37	10.81	10.33	11.08	10.37	11.33
SEV36	370597	213339	10.29	10.71	10.33	10.74	10.29	11.04	10.33	11.28
SEV38	369831	212691	10.22	10.71	10.26	10.75	10.22	11.05	10.26	11.31
SEV40	369401	211781	10.15	10.68	10.17	10.71	10.15	11.02	10.17	11.28
SEV42	368995	210788	10.04	10.64	10.09	10.69	10.04	11.03	10.09	11.30
SEV44	369232	209899	10.00	10.68	10.08	10.75	10.00	11.06	10.08	11.33
SEV46	369984	209368	9.97	10.69	10.04	10.76	9.97	11.06	10.04	11.33
SEV48	370946	209720	9.91	10.63	9.95	10.72	9.91	11.02	9.95	11.29
SEV50	371852	209462	9.86	10.65	9.90	10.73	9.86	11.02	9.90	11.30

Note;

All Climate Change levels detailed above represent respective high risk events in each instance (i.e. a 1% or 1 in 100 year for fluvial, 0.5% or 1 in 200 year for tidal).

HC = Higher Central

UE = Upper End

Modelled Flood Extents

Available modelled flood outlines produced as part of the detailed modelling have been provided to you in GIS format, these show modelled flood extents taking into account flood defences. Climate change will increase flood risk due to overtopping of defences.

Please note; there are currently no available GIS layers for the respective Climate Change scenarios.

<https://ea.sharefile.com/d-s38674e346cc471f8>

Climate Change

The 'Flood Risk Assessments: Climate Change Allowances' are published on gov.uk. This is in replacement of previous climate change allowances for planning applications. You will need to consider this data and factor in the new allowances to demonstrate the development will be safe from flooding. The climate change factors are now more complex and a single uplift percentage across England cannot be justified.

It remains the applicant's responsibility to demonstrate through their proposal and flood risk assessments that new developments will be safe in flood risk terms for its lifetime.

Recorded Flood Outlines

Please find tabulated information below for records of historic flood events.

Flood Event Date	Source of Flooding	Cause of Flooding
December 1981	River Severn	Channel capacity exceeded

The corresponding recorded flood outline/s can be accessed here:

<https://data.gov.uk/dataset/recorded-flood-outlines1>

Please note; the records of flooding from between October 2019 and March 2020 and beyond are still being reviewed, the outcomes of which have not yet been published or reflected within this request for information.

The Recorded Flood Outlines take into account the presence of defences, structures, and other infrastructure where they existed at the time of flooding. It includes flood extents that may have been affected by overtopping, breaches or blockages. Any flood extents shown do not necessarily indicate that properties were flooded internally. It is also possible that the pattern of flooding in this area has changed and that this area would now flood or not flood under different circumstances.

Please note that our records are not comprehensive and that the map is an indicative outline of areas which have previously flooded, not all properties within this area will have flooded. It is possible that other flooding may have occurred that we do not have records for.

You may also wish to contact your Local Authority or Internal Drainage Board (where relevant), to see if they have other relevant local flood information.

Defence Data

Flood defences do not completely remove the chance of flooding. They can be overtopped by water levels which exceed the capacity of the defences.

If flood defences are located in your area, you can access this data here:

<https://data.gov.uk/dataset/spatial-flood-defences-including-standardised-attributes>

Supporting Information

Surface Water

Managing the risk of flooding from surface water is the responsibility of Lead Local Flood Authorities. The 'risk of flooding from surface water' map has been produced by the Environment Agency on behalf of government, using Lead Local Flood Authority surface water information.

You may wish to contact your Local Authority who may be able to provide information on surface water.

It is not possible to say for certain what the flood risk is but we use the best information available to provide an indication so that people can make informed choices about living with or managing the risks. The information we supply does not provide an indicator of flood risk at an individual site level. Further information can be found on the Agency's website:

<https://flood-warning-information.service.gov.uk/long-term-flood-risk/map>

Additional Details

Further details about the Environment Agency information supplied can be found on the GOV.UK website:

<https://www.gov.uk/browse/environment-countryside/flooding-extreme-weather>

If you have requested this information to help inform a development proposal, then you should note the information on GOV.UK on the use of Environment Agency Information for Flood Risk Assessments:

<https://www.gov.uk/planning-applications-assessing-flood-risk>

<https://www.gov.uk/government/publications/pre-planning-application-enquiry-form-preliminary-opinion>