

Environment Agency

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National Flood and Coastal
Erosion Risk Management
Strategy for England



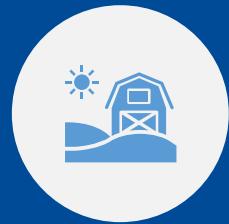


Portreath Catchment Flood Risk

Portreath – coast and catchment



Flood Risk Management Plan



Community understanding



Surface Water



Natural Flood Management



Improve defences



Flood Warning



Monitoring

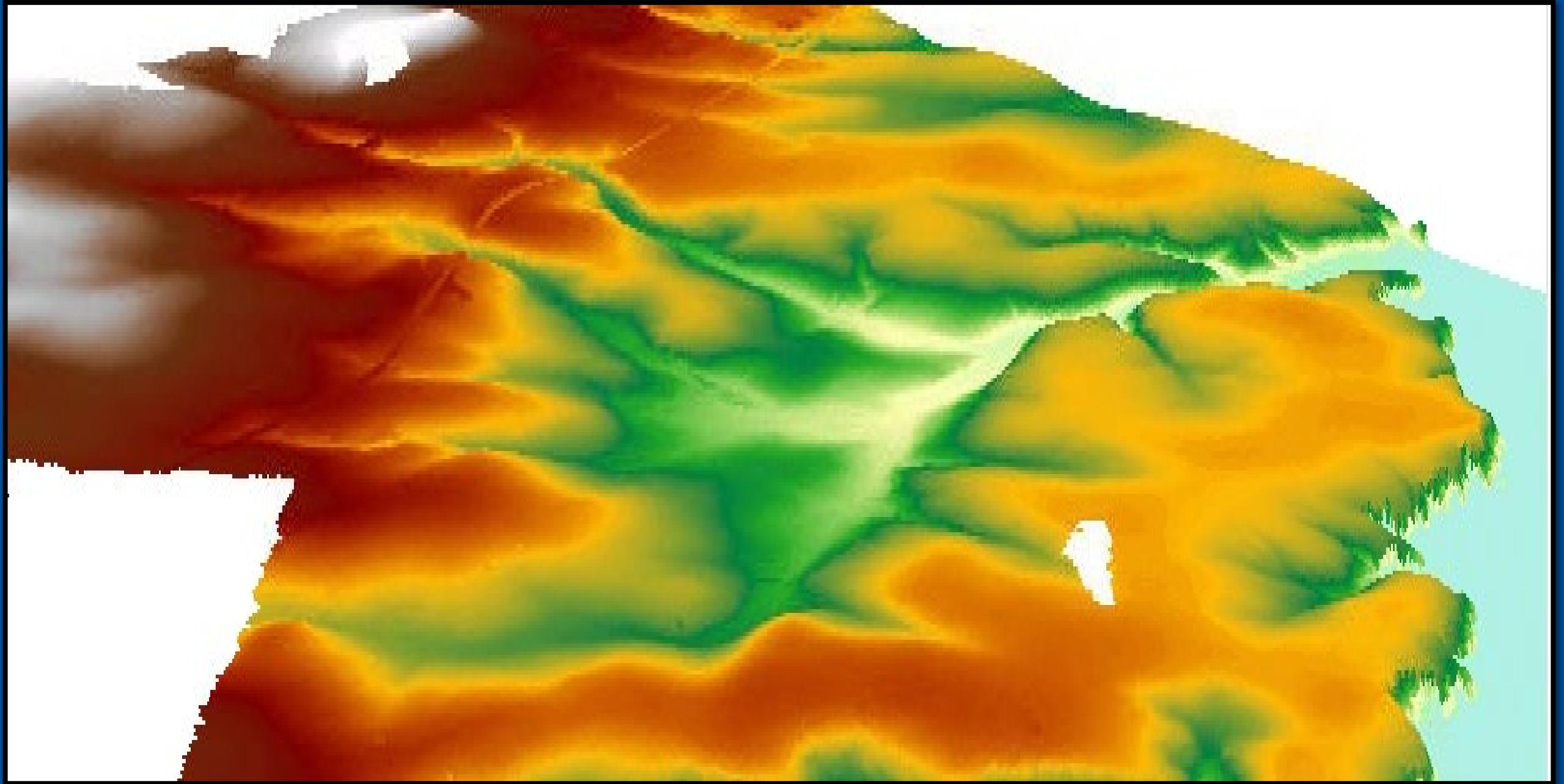


Property Flood Resilience

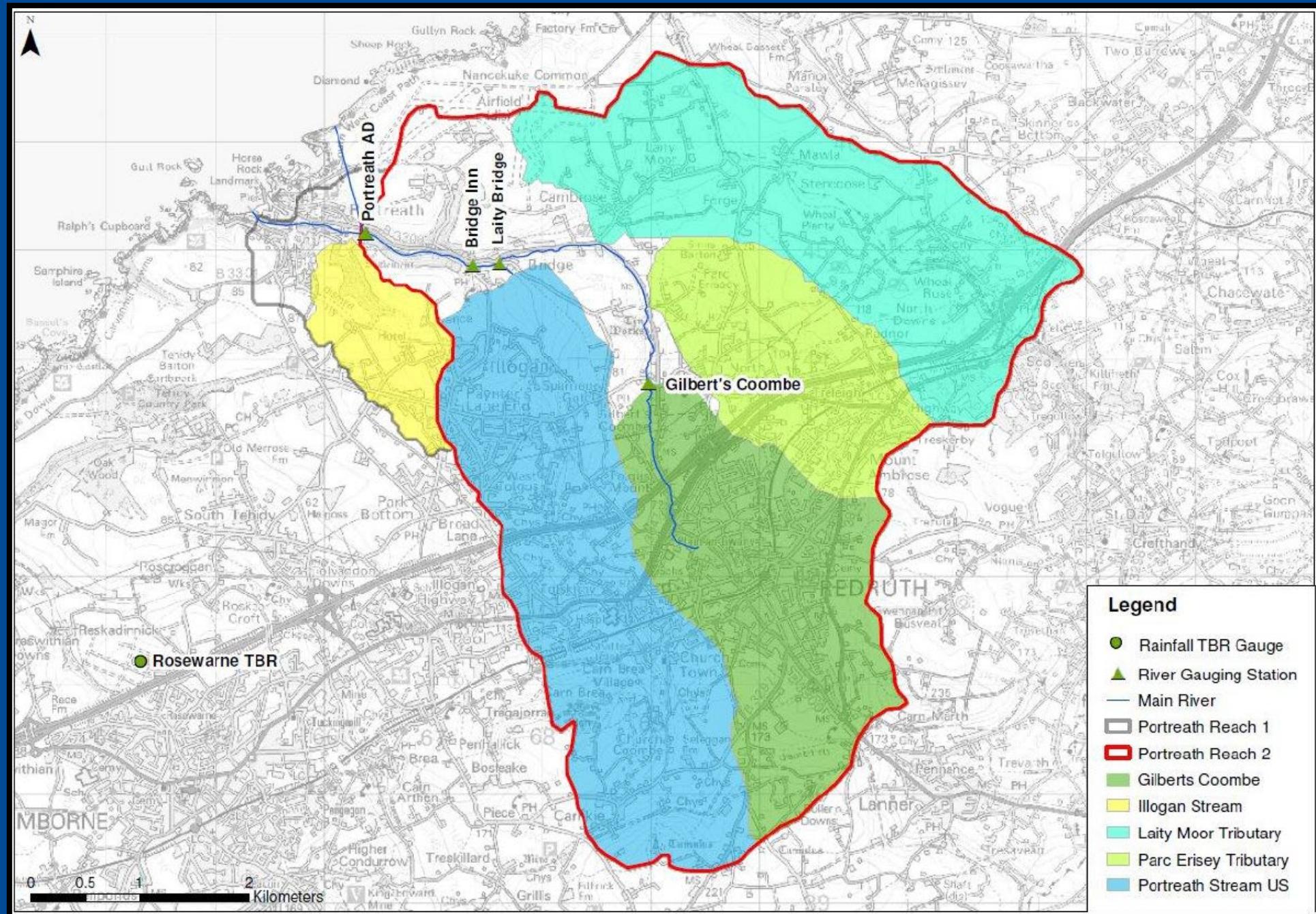


Manage residual risk

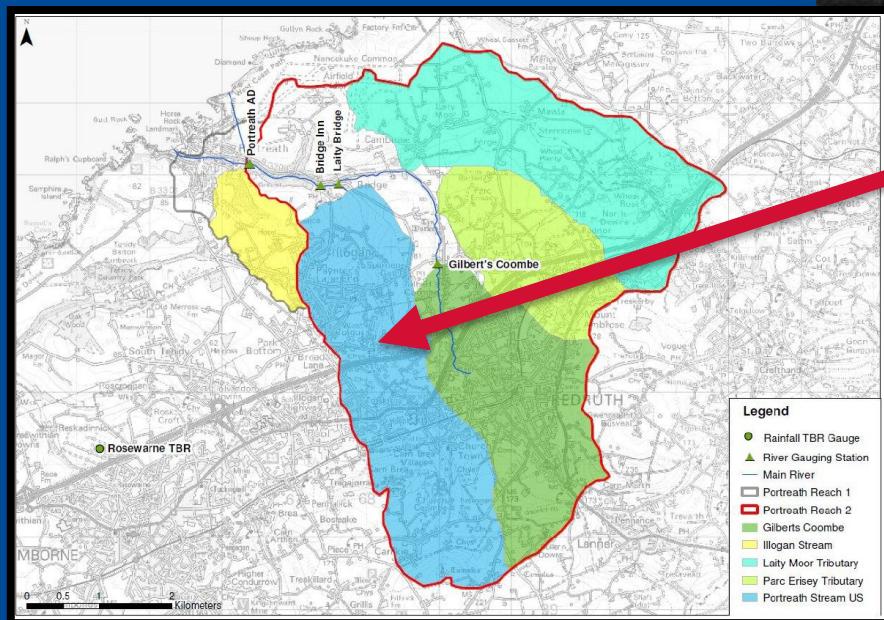
Catchment Overview



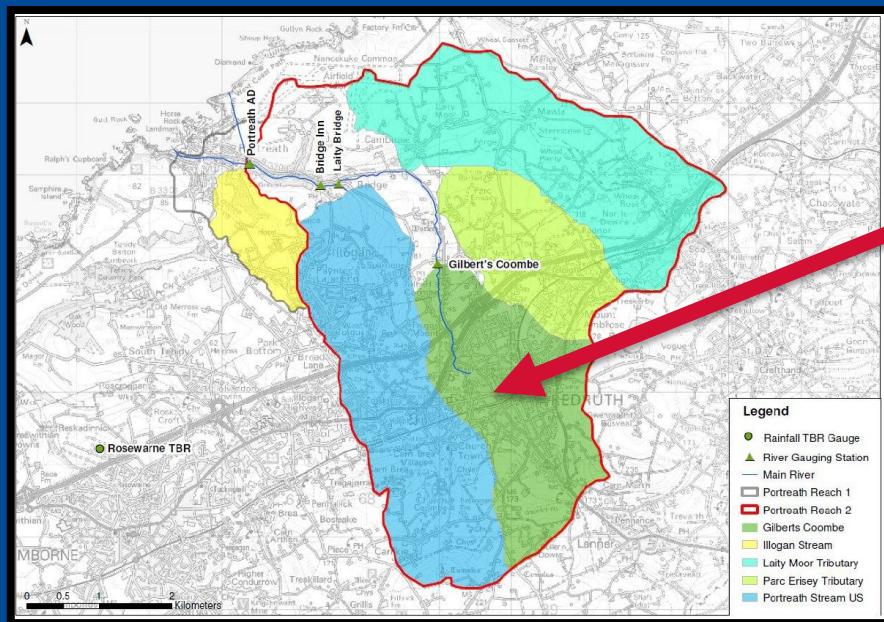
Catchment Overview - 3 Main tributaries upstream Illogan Stream behind the school.



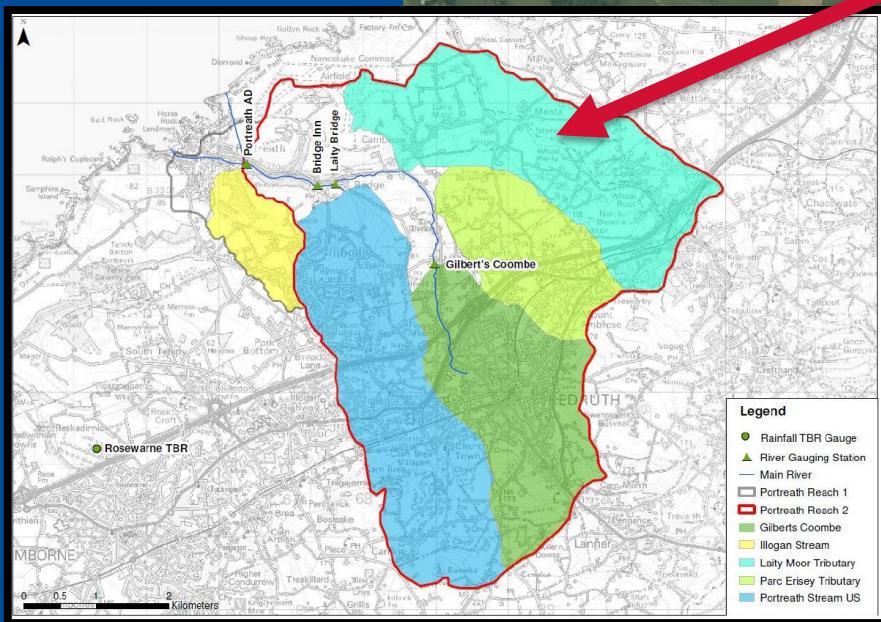
Tolgus mine- Tolskithy – Carn Brea Mined & impacted by the A30



Gilberts Coombe Redruth - Urban



Laity Moor – Cambrose – A Natural Catchment



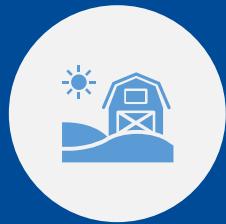
Portreath suffers from catchment flooding



Portreath coastal flood and erosion risk



Flood Risk Management Plan



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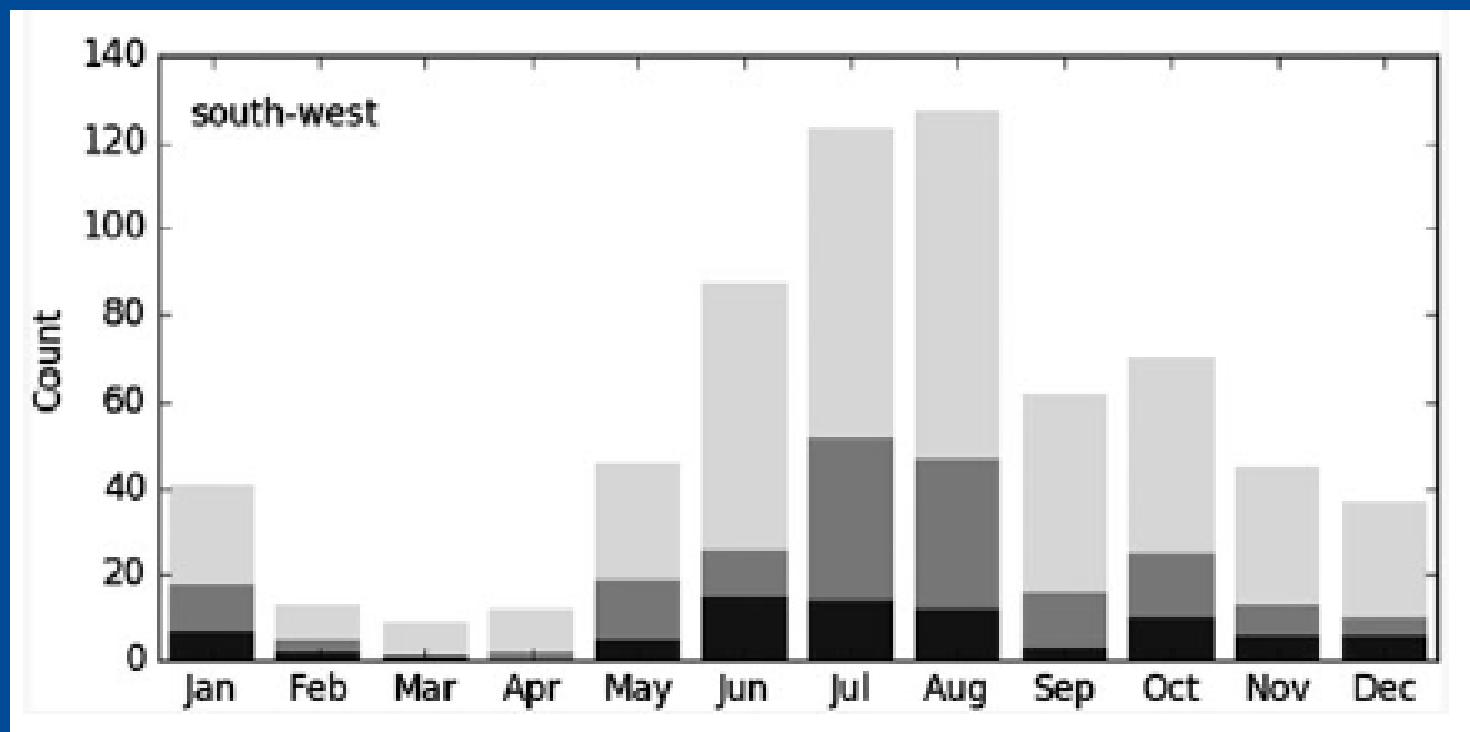
Property Flood Resilience



Manage residual risk

Flash Flooding

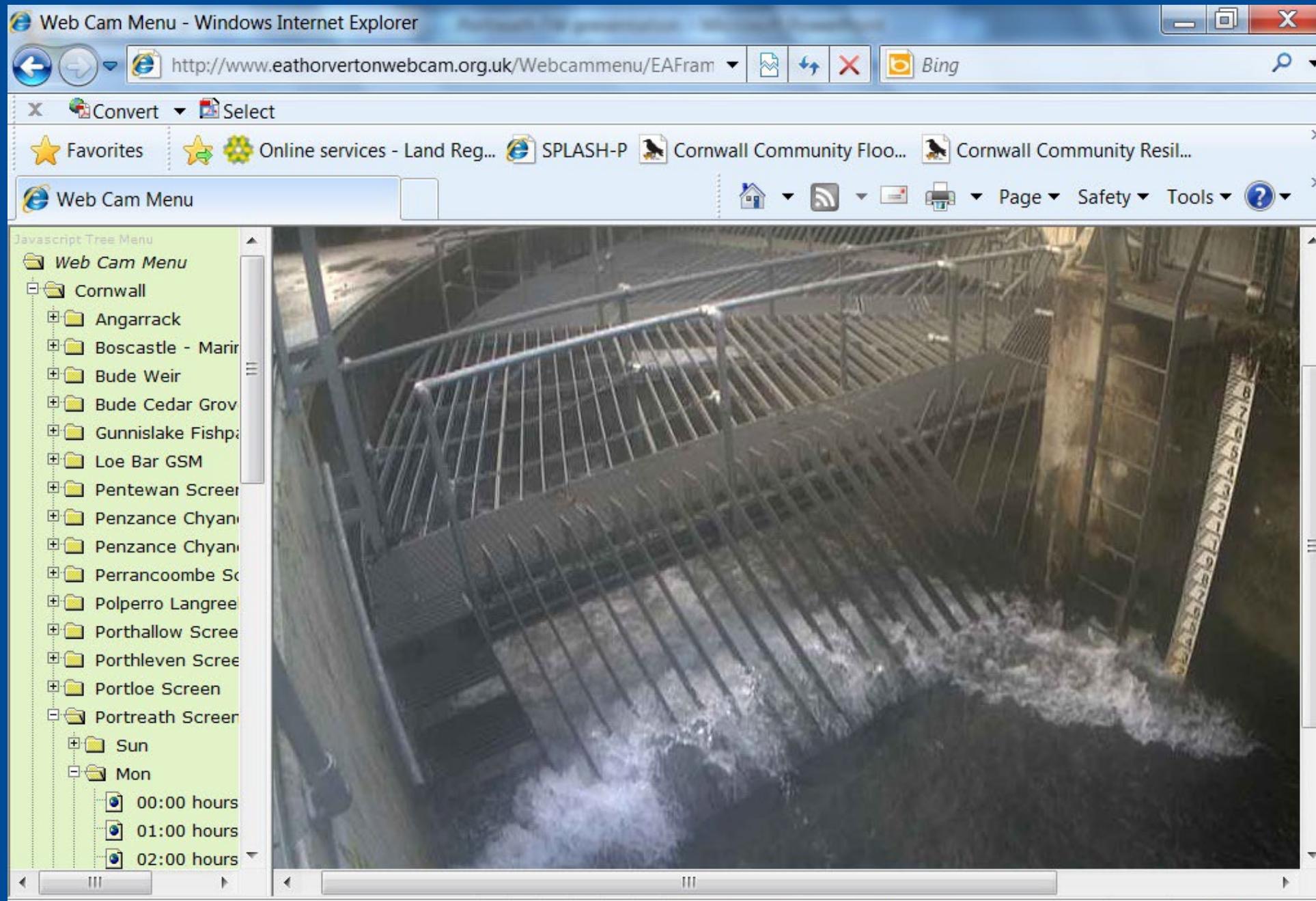
Trends show higher risk of flash flooding in warmer months.



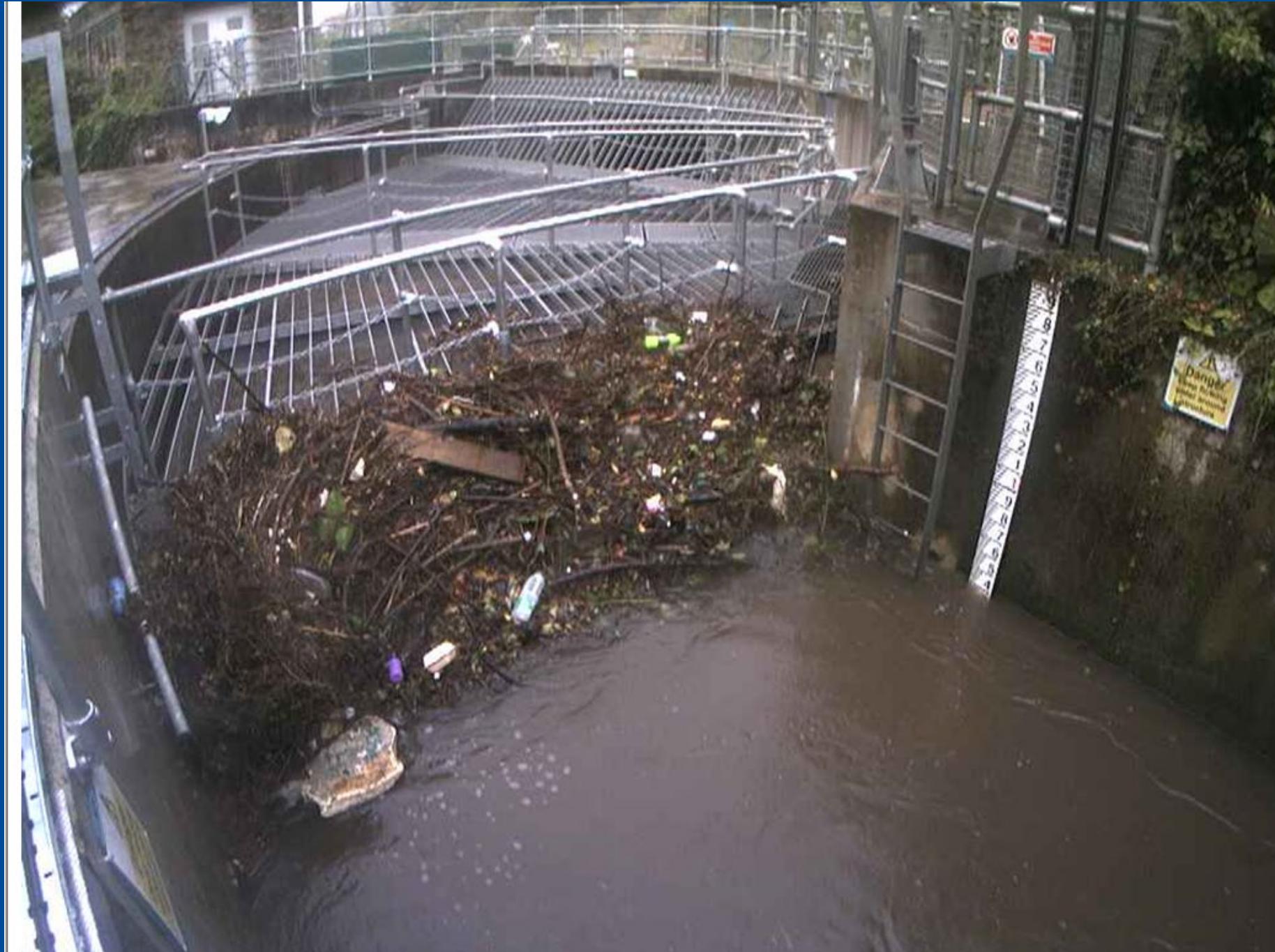
Black = high impact flash floods (death / destruction)

Severe thunderstorms most likely between May and August

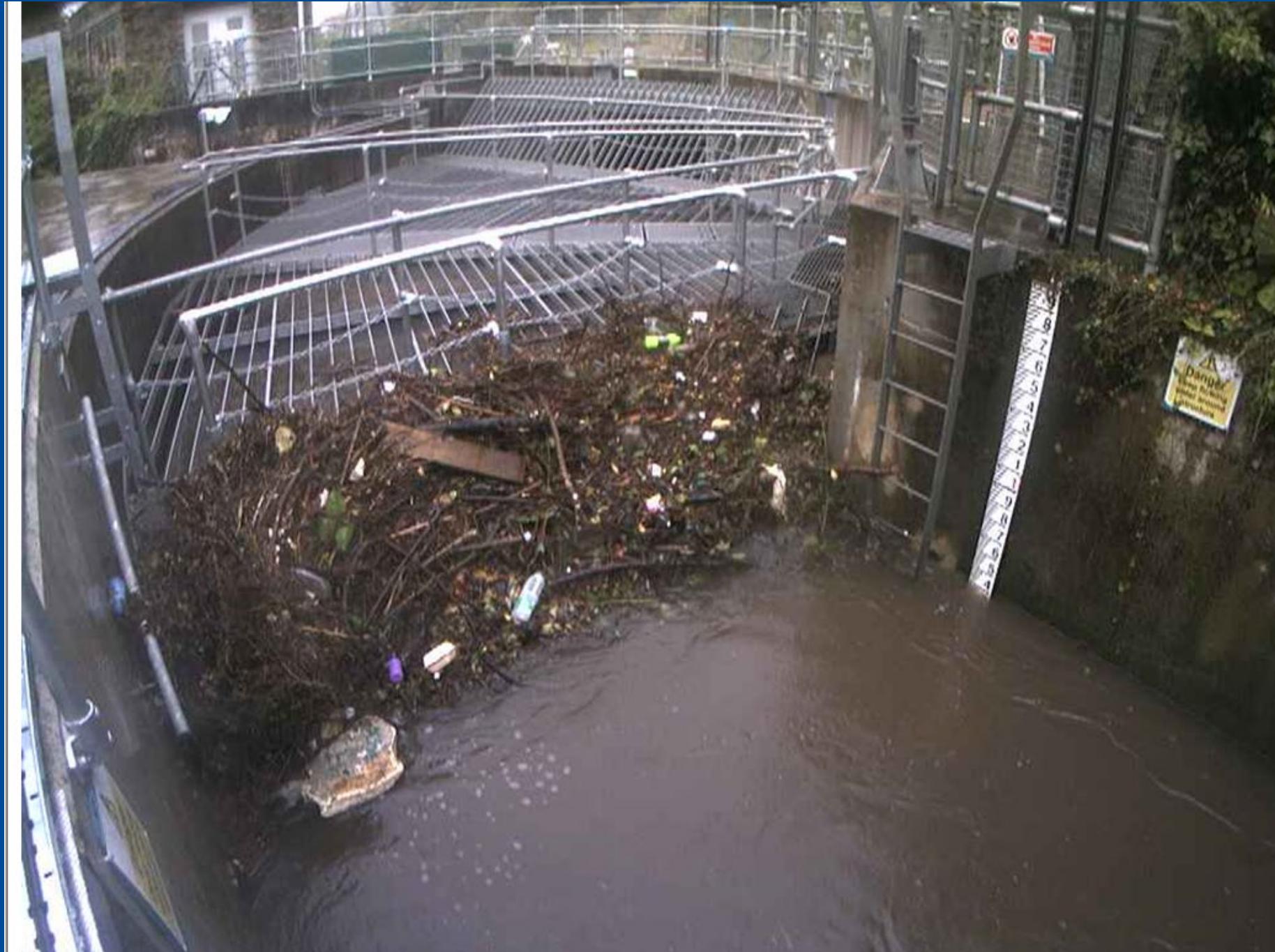
Portreath Screen Clearance



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Portreath Screen Clearance



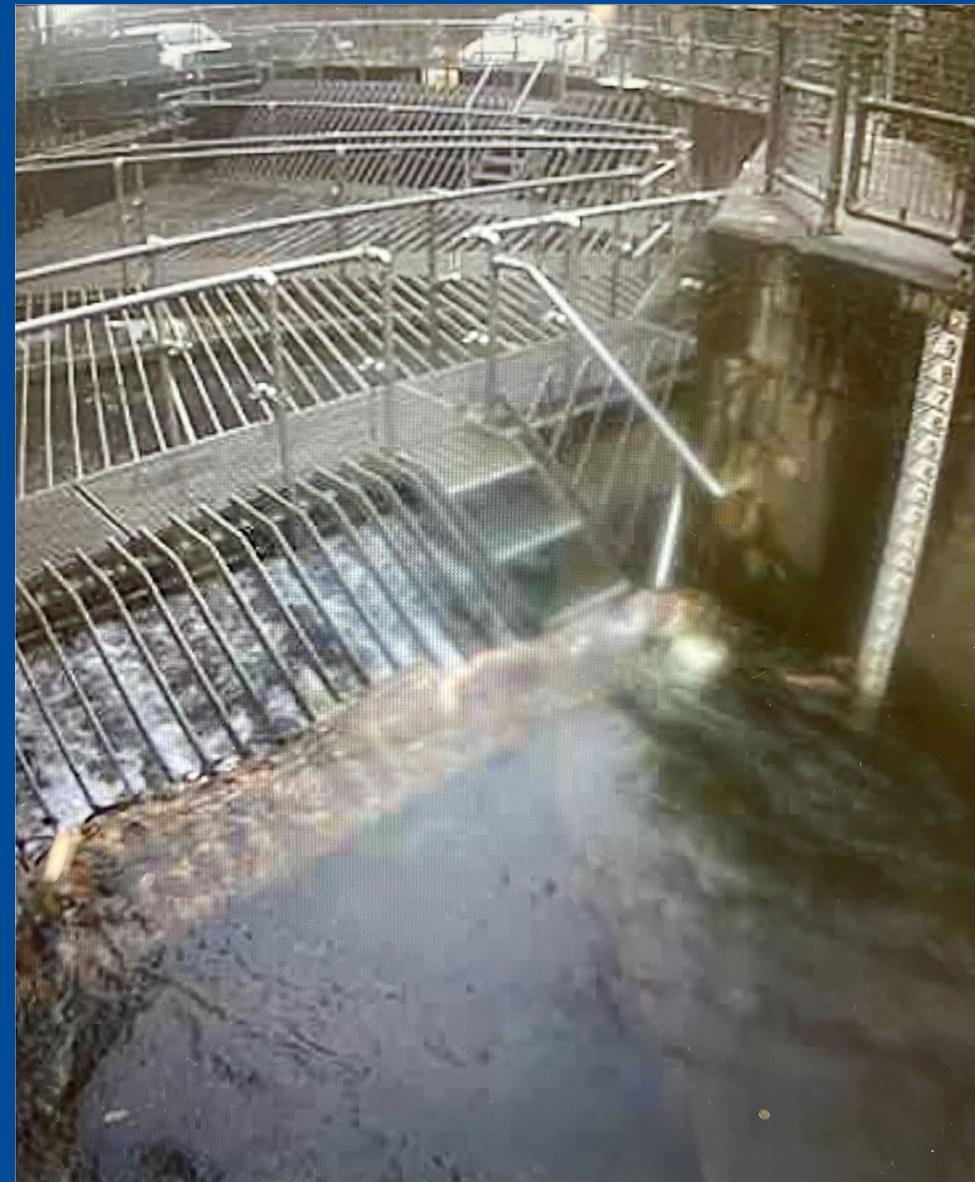
Portreath Screen Clearance



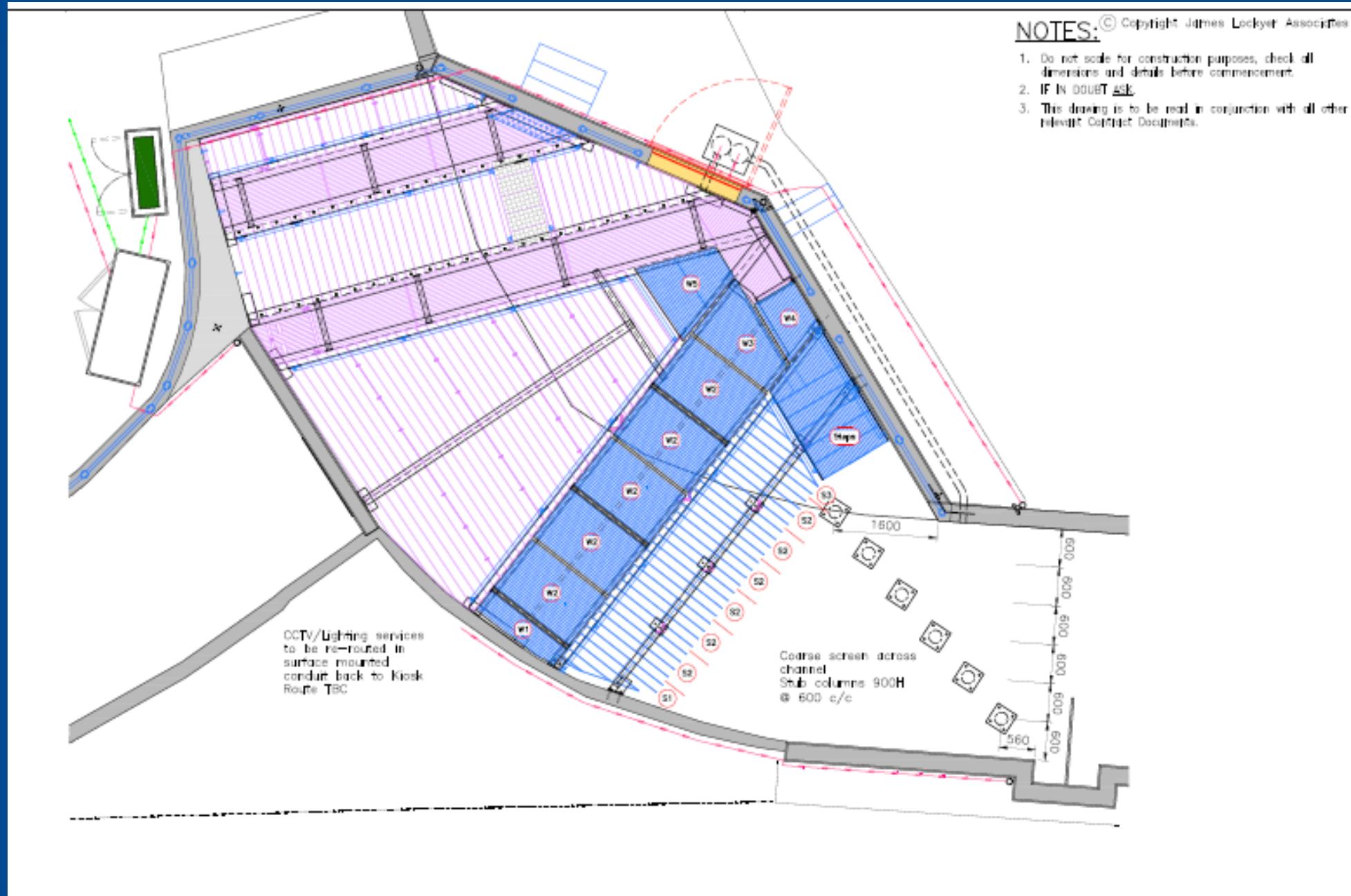
Portreath Screen Clearance



Portreath Screen Clearance



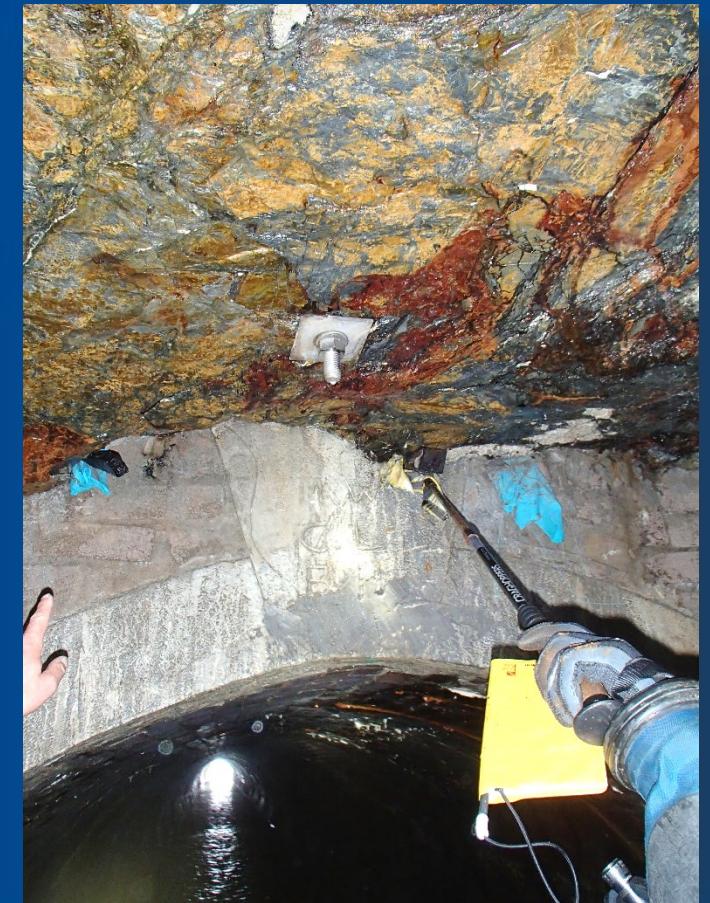
Planned screen improvements



Portreath tunnel



Tunnel Improvements



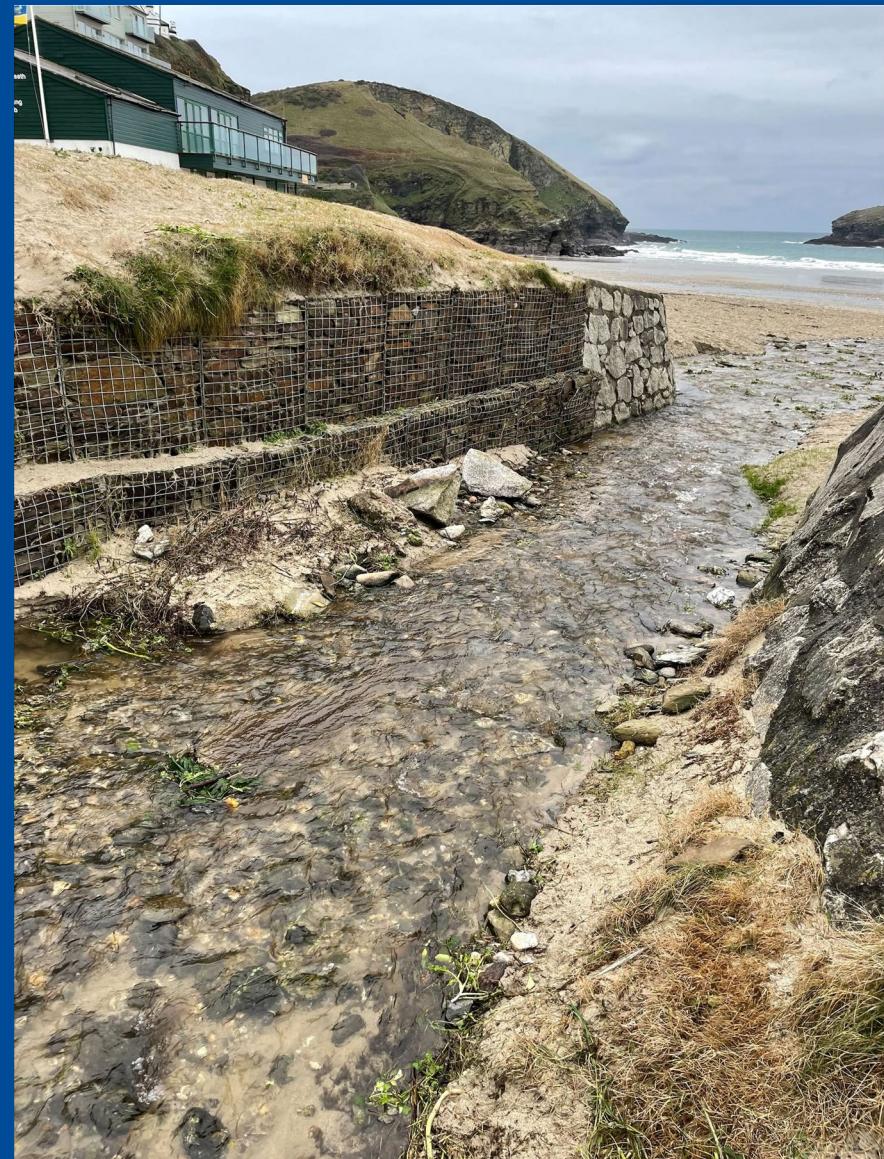
Portreath Channel - enlargement



Maintenance Before and After



Maintenance Before and After



Looking Ahead

- ➔ We will continue to Annually Maintain the River Banks visiting 3 times a year.
- ➔ Weekly Clearance and Inspection of Screen
- ➔ Yearly Inspection of Assets
- ➔ Positively Engage with the community of Portreath in all our future works and plans
- ➔ Provide a 24/7 Emergency Response to a Flooding Event

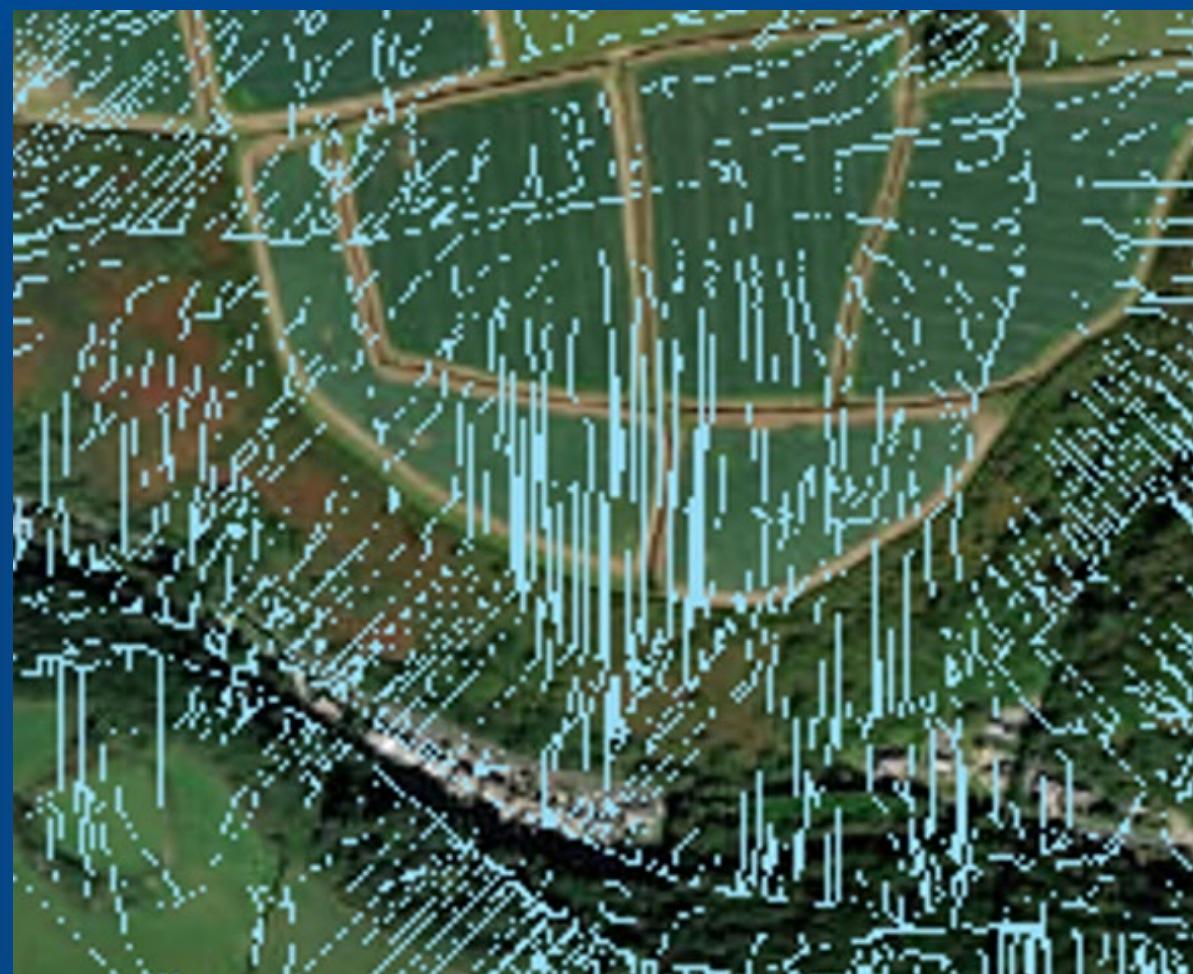
Natural Flood Management



Risk based management of soils



Slopes

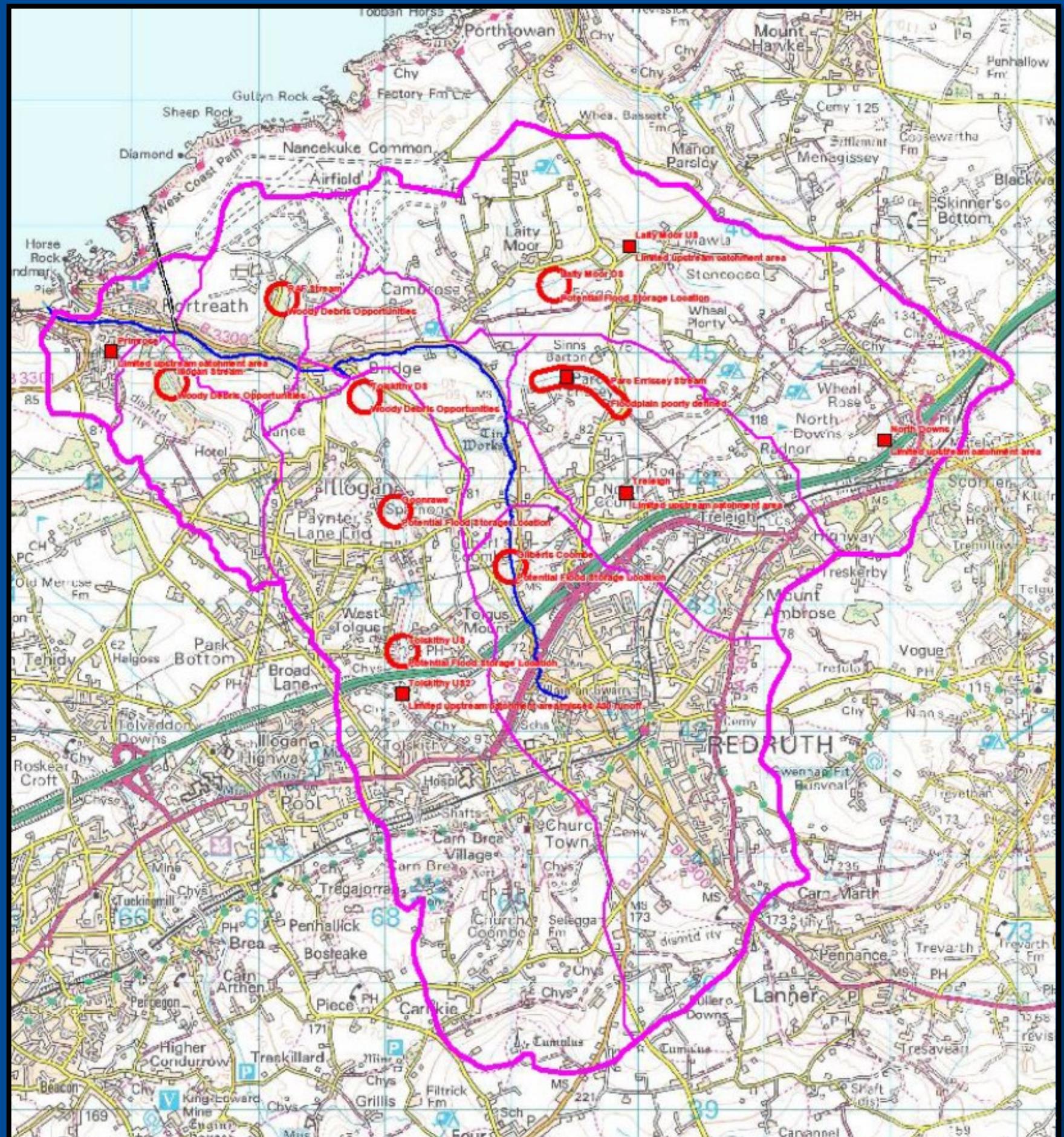


Flow paths

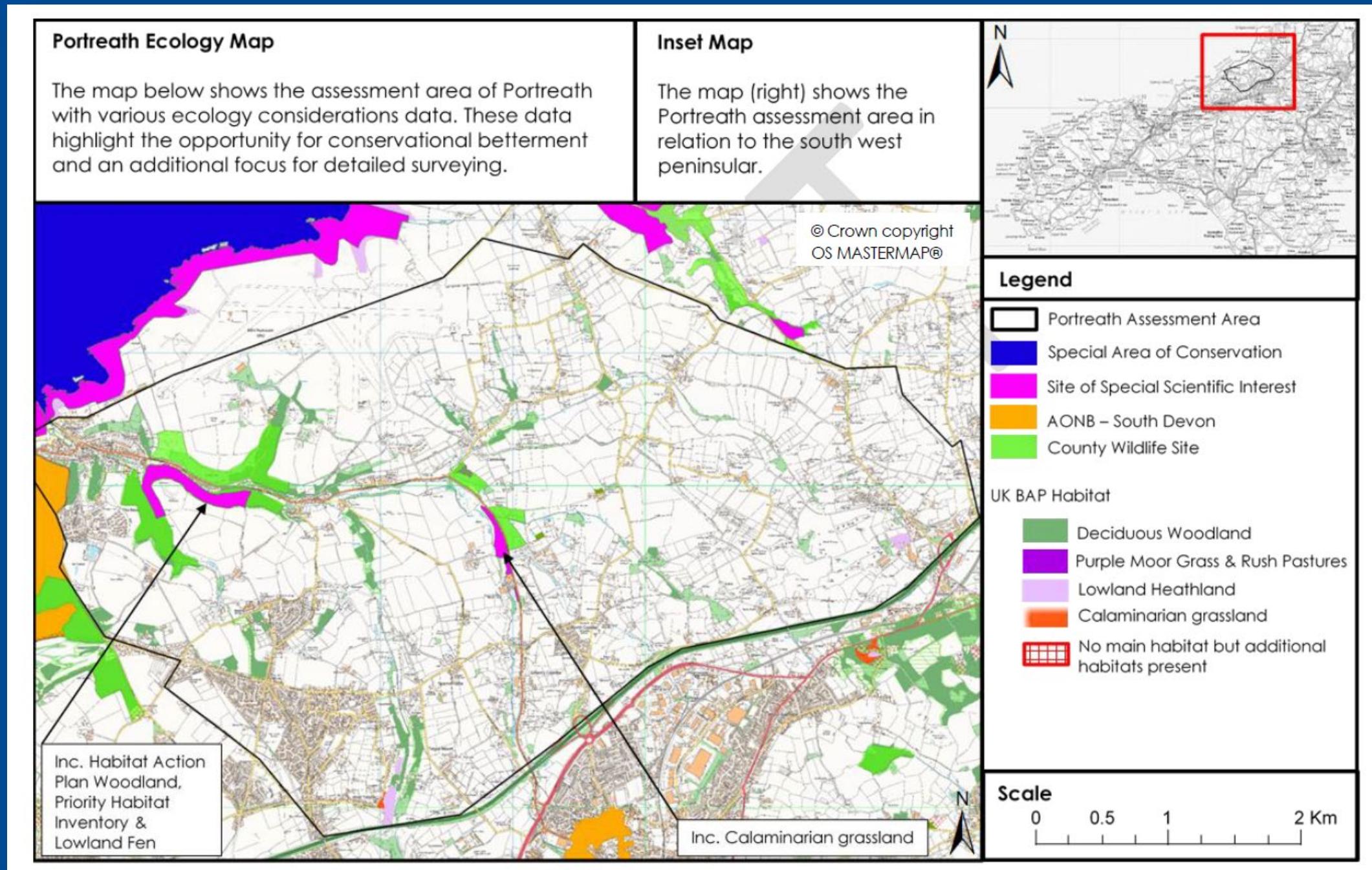
Supporting agriculture



Attenuation locations



Upstream Natural Flood Management



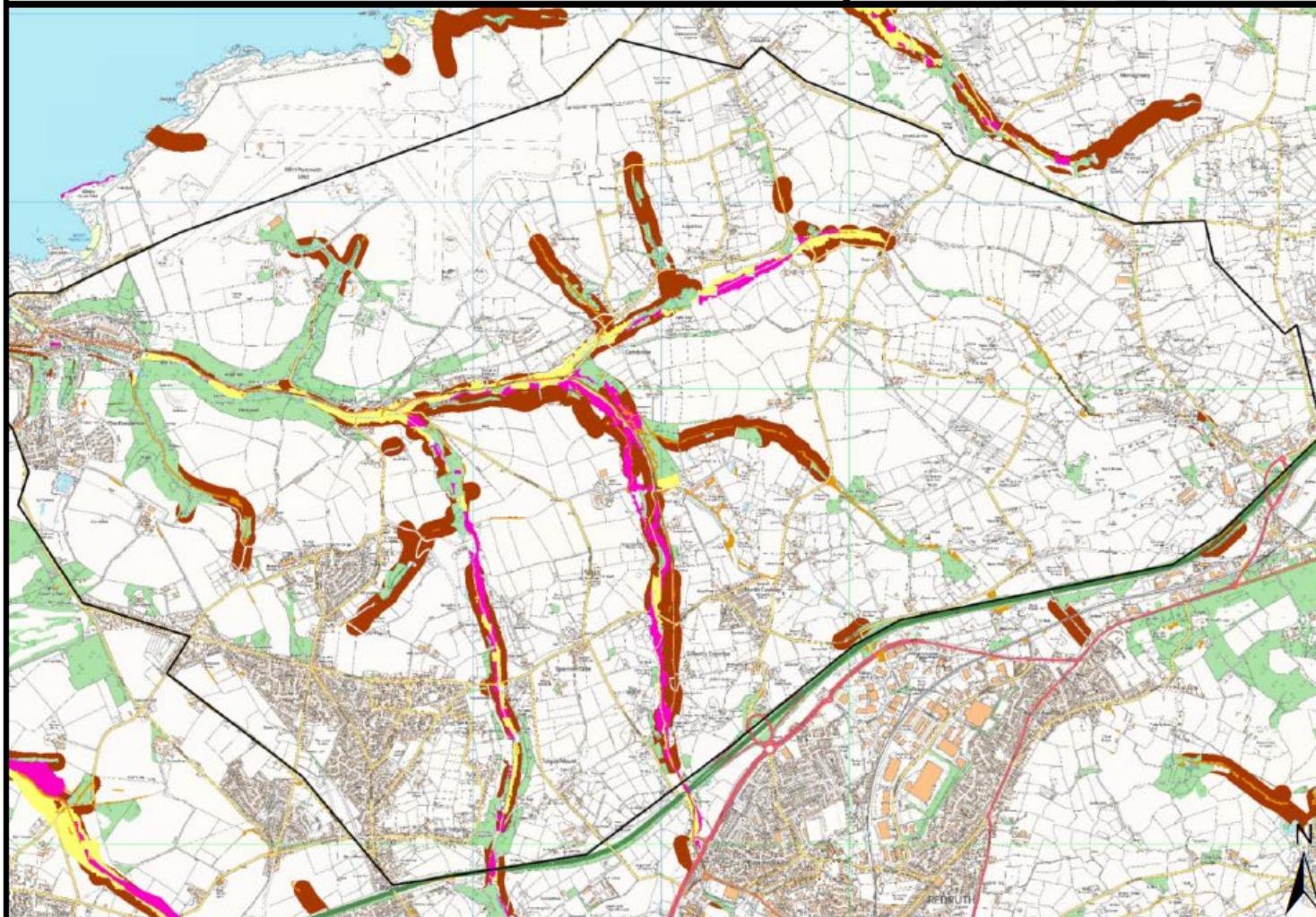
Upstream Natural Flood Management

Portreath Working with Natural Processes Map

The map below shows the assessment area of Portreath with Working with Natural Processes data. These data highlight the opportunity for betterment through woodland planting and runoff attenuation features.

Inset Map

The map (right) shows the Portreath assessment area in relation to the south west peninsular.



Legend

Working with Natural Processes Directory

- Runoff Attenuation
- Gully Blocking
- Floodplain Reconnection
- Floodplain Tree Planting
- Riparian Tree Planting
- Wider Catchment Tree Planting

Portreath Assessment Area

Scale



Working with Cornwall Council



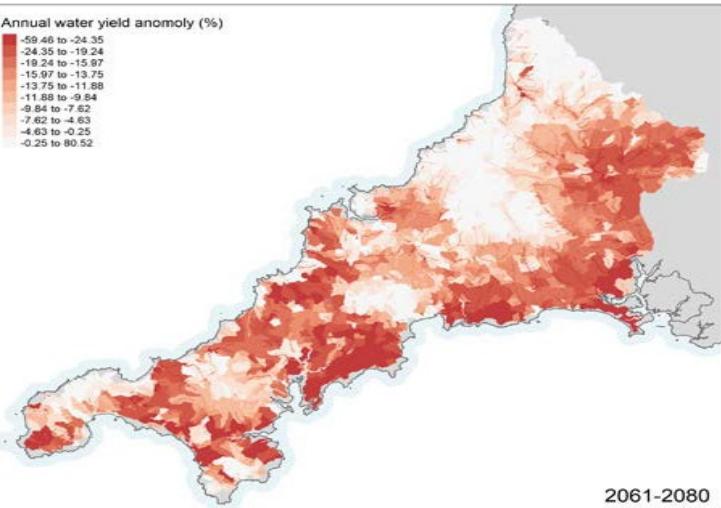
Cornwall Climate Change Risk Assessment

Section 3 Hydrology and Water Supplies

- 3.1 Future Heat Risks in Cornwall
- 3.2 Hydrological Modelling in Cornwall using UKCP18
- 3.3 Cornwall Climate Change Risk Assessment (CCRA3) Flood Risk

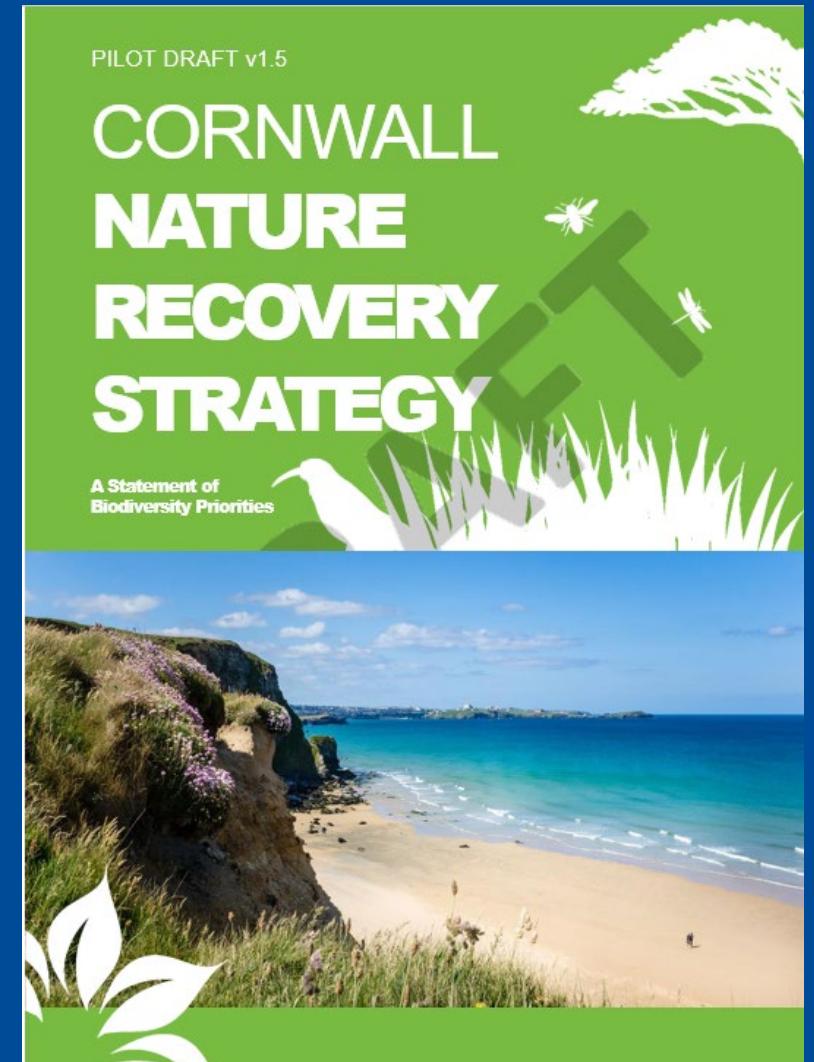
Annual water yield anomaly (%)

59.46 to -24.35
-24.35 to -19.24
-19.24 to -15.97
-15.97 to -13.75
-13.75 to -11.88
-11.88 to -9.84
-9.84 to -7.62
-7.62 to -4.63
-4.63 to -0.25
-0.25 to 80.52



Cornwall's Climate Change Risk Assessment

Local Nature Recovery Strategy



Portreath Flood Group

Three steps to safety

Prepare

- Be aware and know the signs. Signs to watch for:
 - Heavy rain or severe weather reports
 - Rising water levels with churning dark water
 - A build up of debris in rivers or streams
- Plan where to go if you get caught in a flash flood

Act

- Do not walk or drive through flood water
- If you are in a building with at least two storeys and you believe it is safer to stay where you are, you should move to a higher storey
- Call 999 if there's a risk to life, or if you're trapped

Survive

- Call 999 if you're in immediate danger
- Follow advice from the emergency services
- Keep yourself and your family safe

Where can you go for updates on flooding?

Make sure you know your local radio station
[BBC Radio Cornwall – 95.2 FM, 103.9 FM](#)

Follow us  [@EnvAgencySW](#)

Visit <https://flood-warning-information.service.gov.uk>

Your home in Portreath could be at risk of Flash Flooding

Stay safe. Do you know what to do?



Extreme flash flooding is dangerous and can happen very quickly. The effects can be devastating.

Look inside to find out about the dangers of flash flooding and how to stay safe.

www.gov.uk/environment-agency

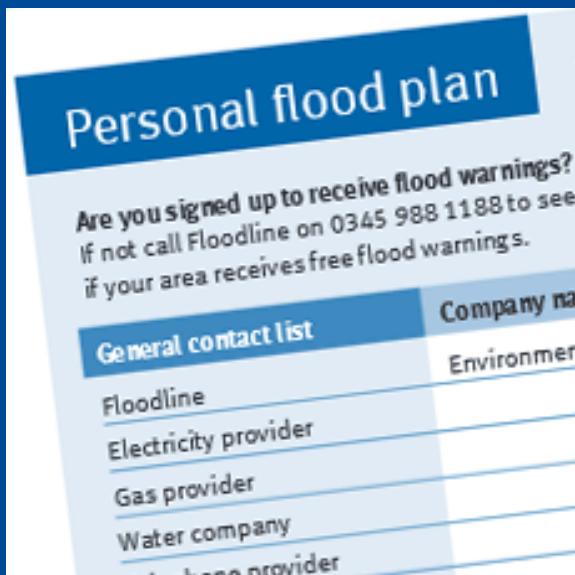


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Flood Warnings and Portreath Flood Group

How can we help?



Personal and community flood plans



Rain gauge



Flood Wardens



Flood Alert



Flood Warning



Severe Flood Warning

Portreath Flood Group put its Community Flood Plan together in 2016 / 2017.

The group recruited 12 volunteers and divided them into pairs in the areas of the village at risk from flooding.



In December 2017 the group ran a live exercise, which saw them test their flood plan during one dark, wet evening, accompanied by the Cornwall Council Emergency Officer.



"It was great to be part of such a massive team effort. We door knocked and handed out evacuation letters. We used the plan to book the hall and call on our tea ladies. The high-vis clothing is so cosy! The flood wardens got lots of compliments from the [emergency] services and residents!"

Cllr Joyce Duffin, Portreath Flood Group Coordinator.

"You should be very pleased with the results of the activity. It made a huge difference and the whole process so much more responsive. A huge thank you from me. The group was awesome!"

Arthur Roberts, Resilience and Emergency Officer at Cornwall Council.

Flood Risk Management Plan



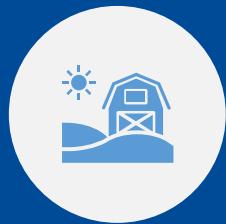
Support Highway Authorities and Risk Management Authorities to review surface water management in the catchment and in Portreath



Work in partnership with the community to better understand the current and long term coastal and fluvial flood risks in Portreath



Deliver improvements to the existing flood alleviation scheme in Portreath



Work with partners to explore opportunities to deliver nature-based solutions in the catchment in Portreath



Review the flood warning and forecasting needs for the river and the sea in Portreath



Undertake a review and update hydrometric monitoring in Portreath



Work with partners to investigate Property Flood Resilience for properties that remain at risk in the catchment and in Portreath



Work with partners to review flood defence exceedance and contingency planning in Portreath

Contact us

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