Portreath Stream Flood Alleviation Scheme

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29 November 2018



Background

- EA project (started in 2016)
 - Fluvial flood risk from Portreath Stream
 - Hydraulic model, initial assessment and investigations...
 - Weak financial case.
 - Autumn 2017 Budget £40m Defra 'Deprived Community' fund opportunity
 - Speculative Bid £1.5m awarded July 2018!
- As a result:
 - Revitalisation and acceleration of project
 - Now one of our top delivery priorities.
 - Currently in optioneering stage.



Funding

Defra 'Deprived Community Fund'

£ 1.500 million

Highways England EDF contrib'n SWRFCC Local Levy

£ 0.020 million

£ 0.430 million

Flood Defence Grant in Aid (FDGiA)

£ 2.093 million



Key challenges & variables

- 1. Project Cost = a high level estimate
 - Inevitable early stage cost uncertainty
 - Actual Cost will depend on solution actually selected
- 2. FDGiA funding = function of scheme benefits
 - Benefits are a function of solution
- 3. Optioneering is an iterative process
 - What do we do if preferred option cost > funding ?
 - Seek additional funding to meet cost?
 - Reduce project scope (and cost) to match funds?



Key constraint

- 1. Project delivery by 31 March 2021
 - Condition of Defra funding linked to EA's 6 year programme and associated delivery target.
 - Only 28 months..... not long.



Programme

Optioneering

Now

(incl. technical calcs, environmental surveys, costs & benefit analysis, finances, community engagement...)

> Preferred Option selection

March'19

- > Detailed Design, Planning & Consents
- > Tender
- Business Case approval

April'20

- Construction start
- > Construction complete

March'21



Portreath Stream

Flood Alleviation Scheme

Catchment overview









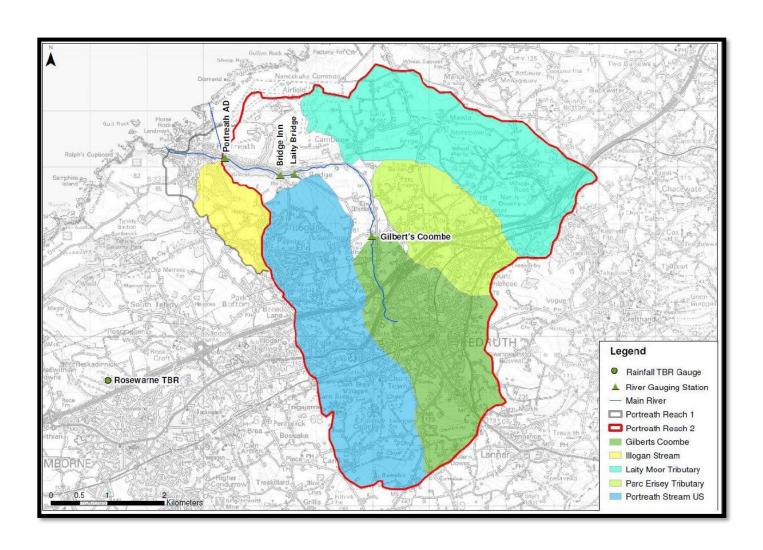
Hidden Valley



Coastal plateau



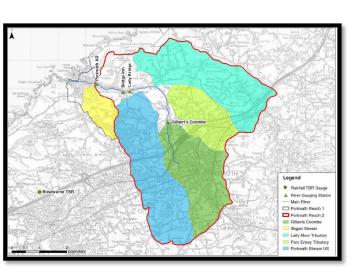
Portreath Catchment – 4 similar tributaries

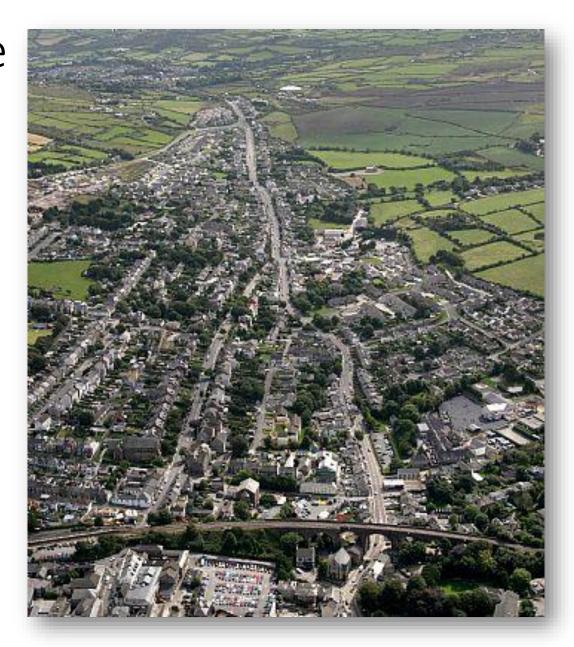


Laity Moor – Cambrose – Natural

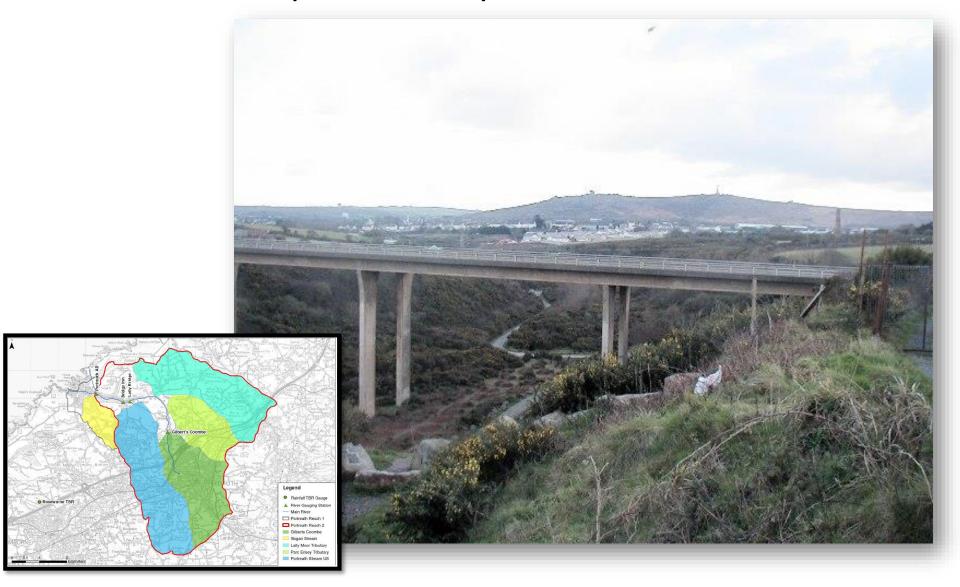


Gilberts Coombe Redruth - Urban





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





Risk perception:

Perched channel

Natural channel



3 Main Options

- Upstream attenuation
- Improved conveyance through the town
- Excess flow bypass culvert

+

Localised improvements



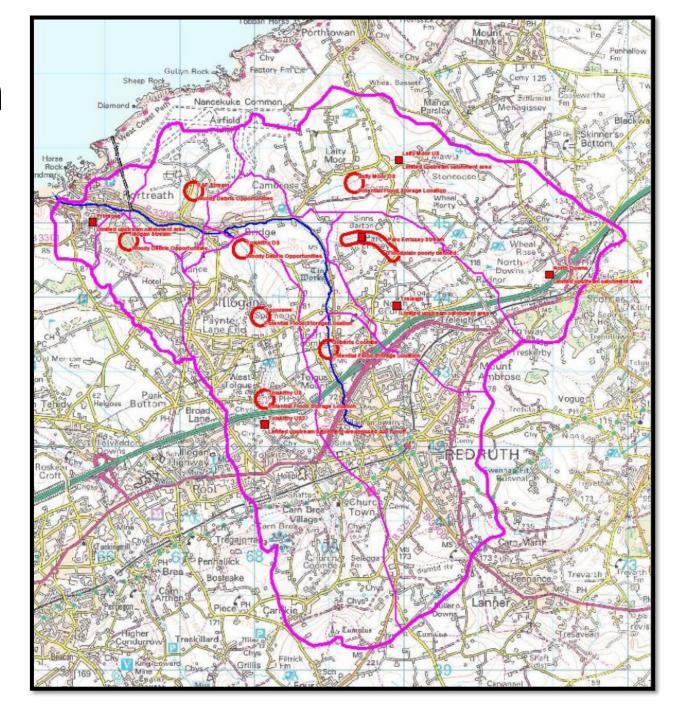
Attenuation reservoirs







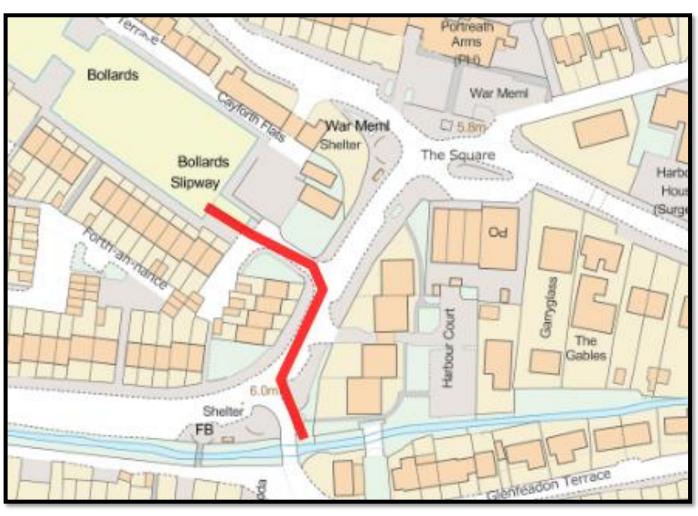
Attenuation locations



Portreath Channel - enlargement



Portreath Channel – overspill culvert outfall to harbour



Localised Improvements Nancecuke Stream – trash screen and road improvements





Questions

Interested in:

- your views, particular concerns etc?
- Best way to engage with you & community ?



Harbour wall project - update



- £990k project FDGiA & LL funded
- New RC wall with stone cladding
- New steps & access ramp repair



Harbour wall project - update

- Press Release 14 Nov
- Site mobilisation 15 Nov.
 - cable diversion completed
 - further trial holes carried out for the new wall foundations (no peat found)
 - existing steps and wall remains removed
 - reinforcing steel on order, due to be delivered to site next week
 - plan to pour at least one base slab and install the stainless steel bars before Christmas
 - 2 week Christmas/New Year site shutdown
- Planned completion March/April 2019
- Temporary defence remaining in place until works complete.

