Carlisle City Council scrutiny panel meeting:

December Cumbria Floods Partnership update

Jim Ratcliffe Eden Catchment Director

01 December 2016



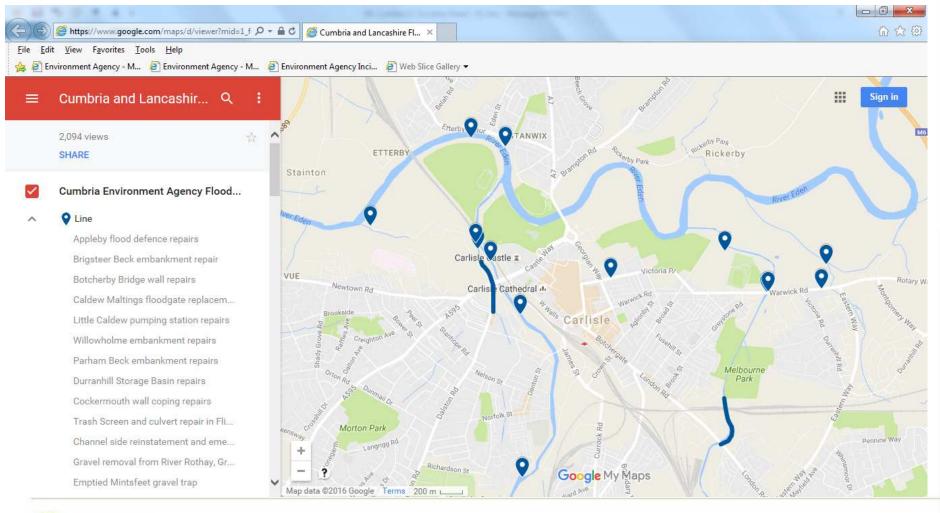
Winter preparation in Carlisle



- ◆ 16 projects in response to Storm Desmond in Carlisle City Council area.
- ◆ Circa £750,000 cost.
- Separate to £25 million future investment programme.



Environment Agency recovery work (http://bit.ly/2fPLG9x)





Winter Readiness 2016/17



temporary flood barrier to support communities at risk



principal depots with 8-12 hour* deployment anywhere in England



500k



sandbags at our depots





mobile pumps 4 inch and over to manage flooding and assist with recovery







enabling works at over 30 locations complete

30



operational plans for barrier and high volume pump deployment



trained and ready site controllers



£12.5m

real time video streaming

incident command vehicles with



approximate investment in winter readiness

^{*} excludes ultra high volume pumps

Improved Capability

| Assets | Winter 2015/16 | Pre winter 2016 |
|------------------|-------------------|-----------------------|
| sandbags (k) | 177 | 500 |
| A barrier | 8 | 40 |
| ICVs | 2 | 4 |
| light towers | 0 | 14 |
| pumps | 180 | 250* |

^{*} Interim arrangement in place until £4.6M Phase 2 funding is available in 2017/18. Pumps are 4 inch and over





Temporary defence deployment



- Looking at 200 locations across Cumbria and Lancs.
- Looking at 3 locations in Carlisle.



- Critical that deployments don't make situation worse elsewhere.
- Community engagement key before plans signed off (circa Jan 2017).

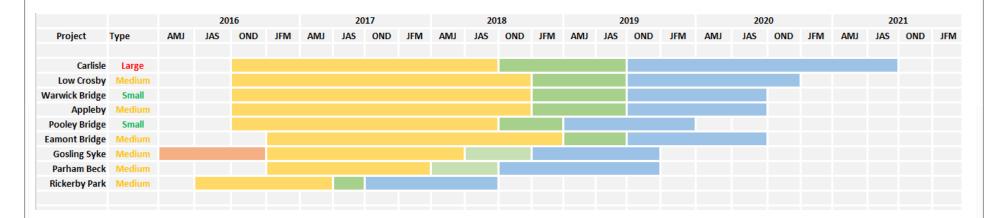


Environment Agency Carlisle area flood risk project delivery programme

Project Scale (incl. Risks)

<£1,000,000 Small <£5,000,000 Medium

>£5,000,000 Large



Project Stages and Activities

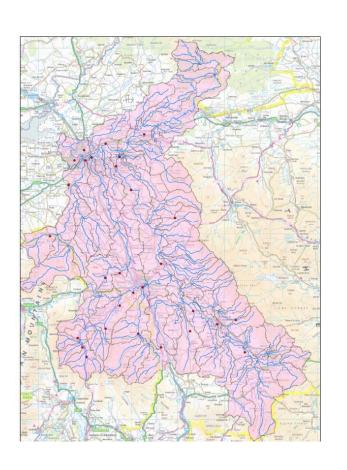
Flood Risk Modelling & Mapping, Scheme Options Testing and Selection, Outline Design, Ground Investigations, Consultation and Scheme Approvals
Initial assessment of flood risk

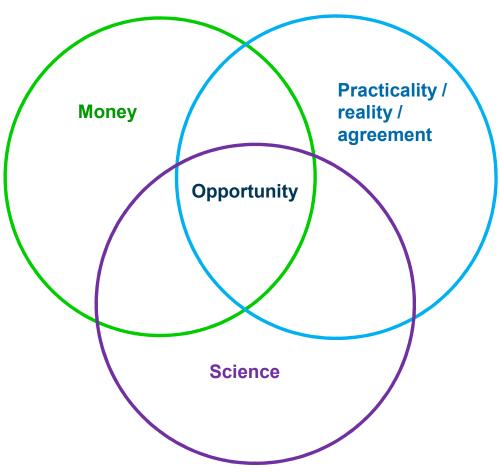
Procurement of Contractor, Scheme Detailed Design, Planning Application and Permission, Other Consents (e.g Environmental)

Scheme Construction



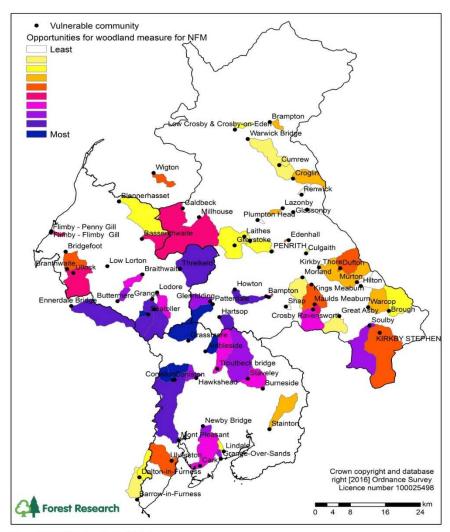
A catchment approach: How we'll make progress

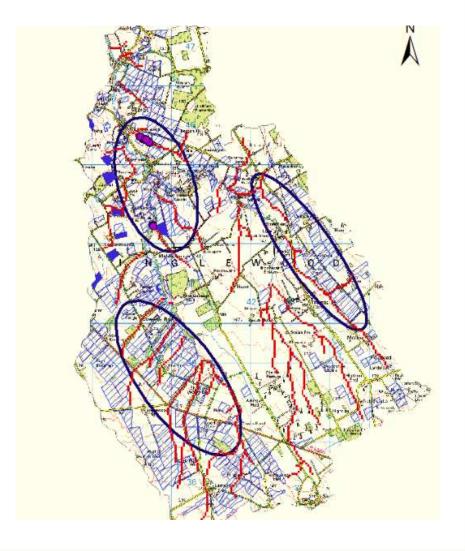






Tools to help decision making



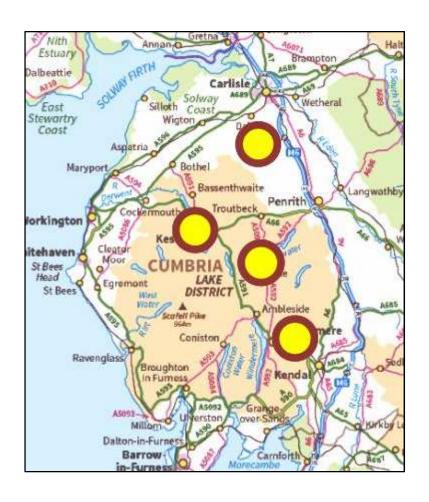


Cumbria Floods Dec 2015.

Catchments (<100 km2) upstream of flooded properties; ranked according to the opportunities for woodland measures to mitigate flood risk; woodland creation, amending forest drains and felling plans and creation of debris dams.

Roe & Ive catchment (Stockdalewath)

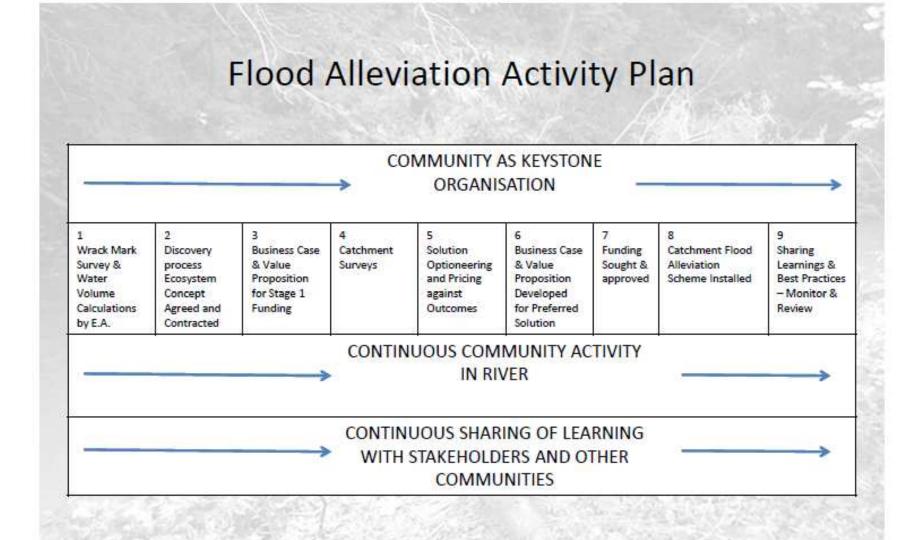
CFP pilots areas



- Impacted communities but also active & engaged communities.
- Opportunities for combining activity across CFP themes.
- All have individual makeup of issues and geography.
- Catchment size for NFM.



Stockdalewath community approach



Patterdale (Genridding) community approach

Community Flood Group "Toolkit"







