## Quantifying the benefits of Flood and Coastal Erosion Risk Management - stakeholder and community engagement and modelling, mapping and data

Appendix 1 - Model evolution

Report - SC130008/R2 Science Report









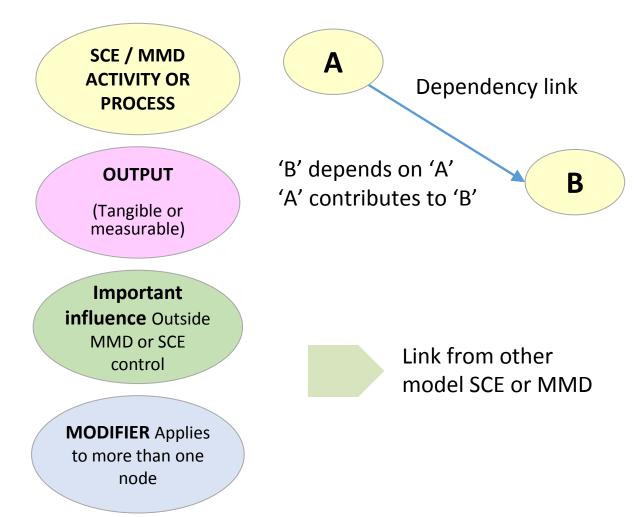






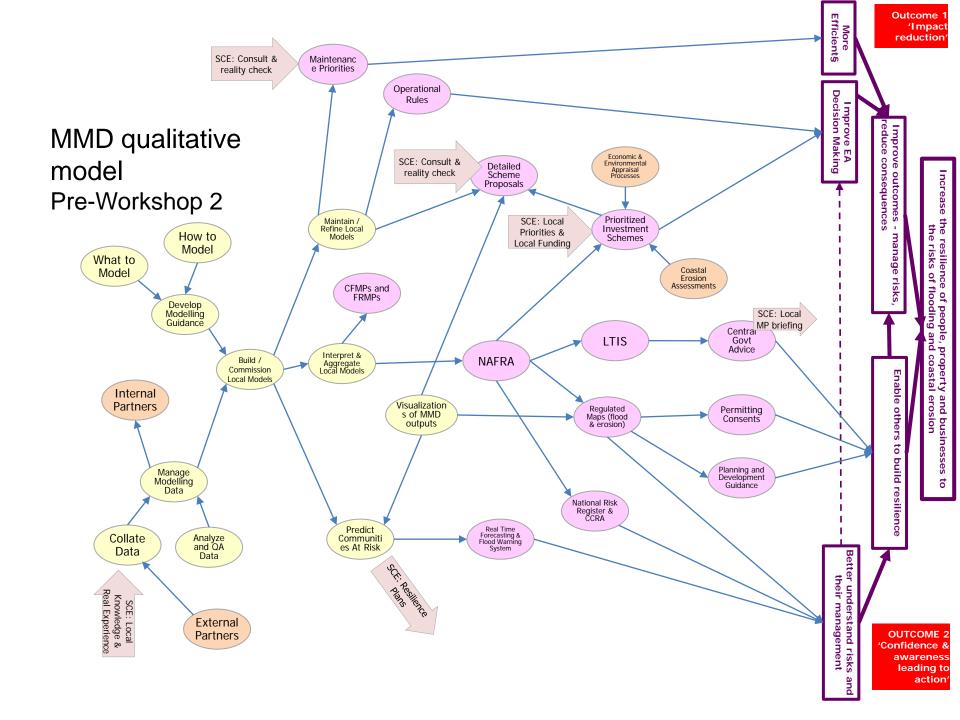


## **Key to models**



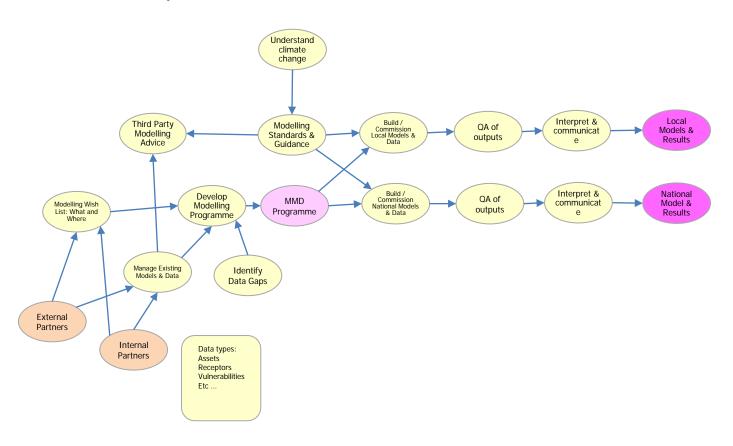
## A1.1 Model evolution – modelling, mapping and data

A1.1.1 Qualitative model

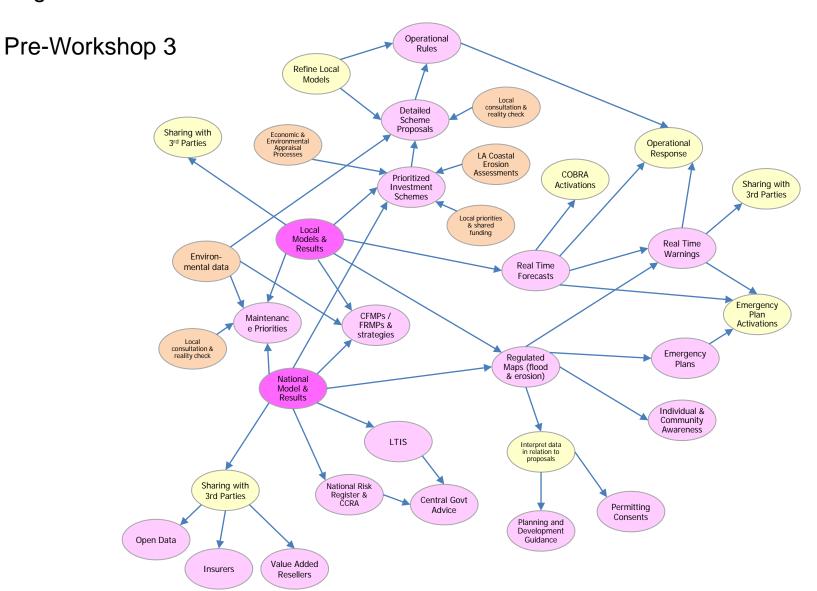


Page 1: Activities leading to the production of Local and National Models

### Pre-Workshop 3

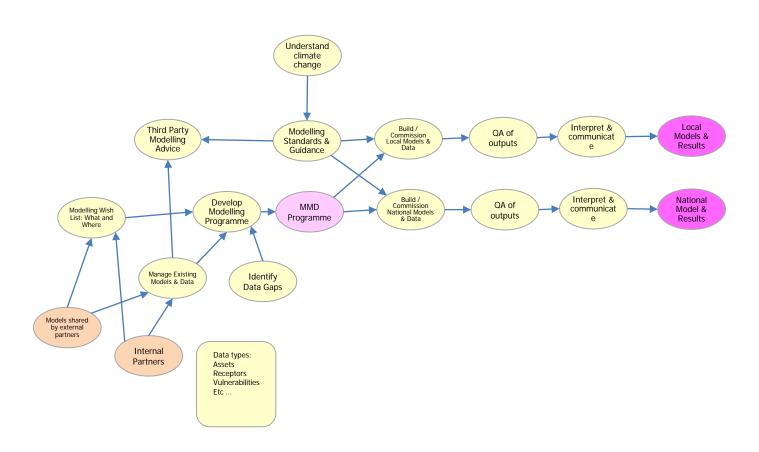


## Page 2: The uses made of Local and National Models

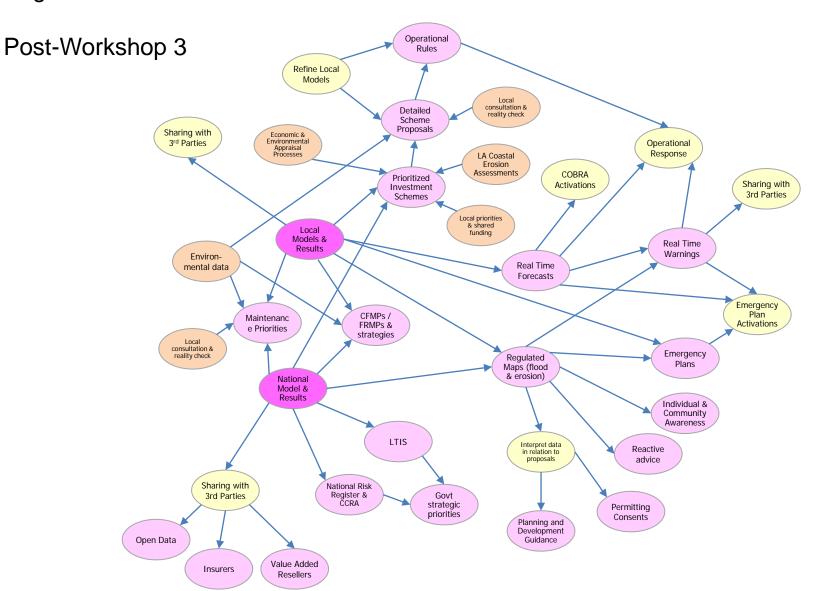


Page 1: Activities leading to the production of Local and National Models

#### Post-Workshop 3



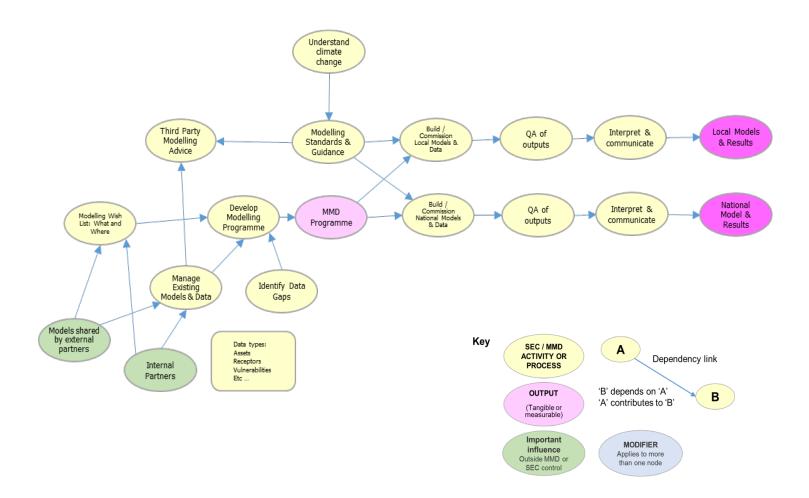
## Page 2: The uses made of Local and National Models

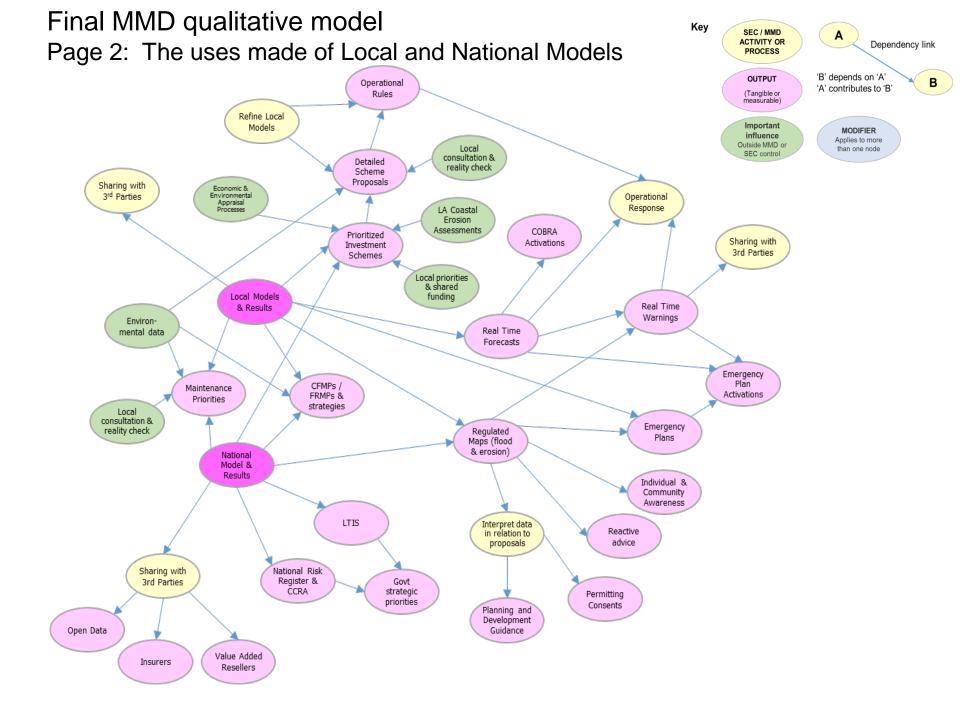


# Appendix 1.1 – Model evolution – modelling, mapping and data

1.1.2 Final qualitative models

## Final MMD qualitative model Page 1: Activities leading to the production of Local and National Models



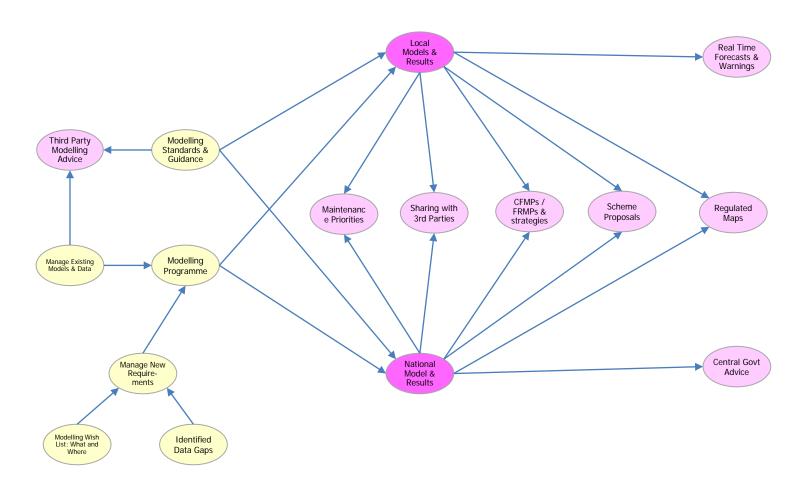


# A1.1 – Model evolution – modelling, mapping and data

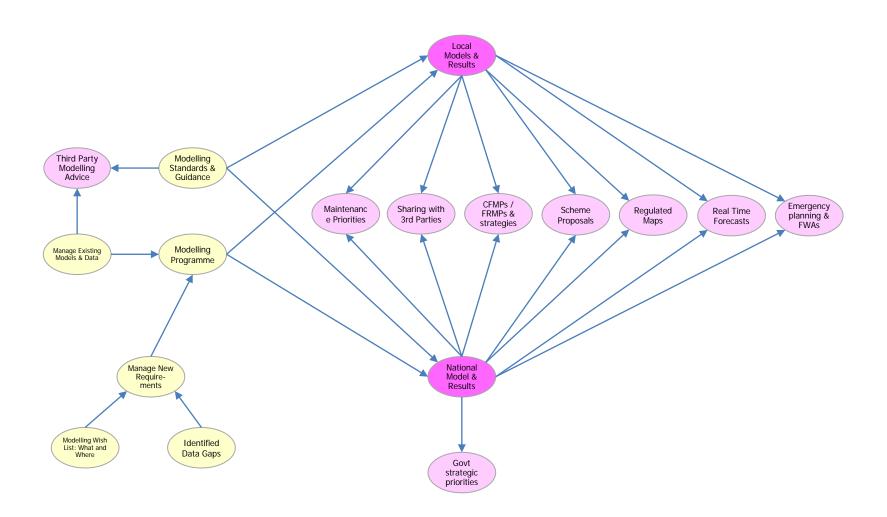
A1.1.3 – Simplified model for quantification

## Simplified modelling, mapping and data model Pre-Workshop 3

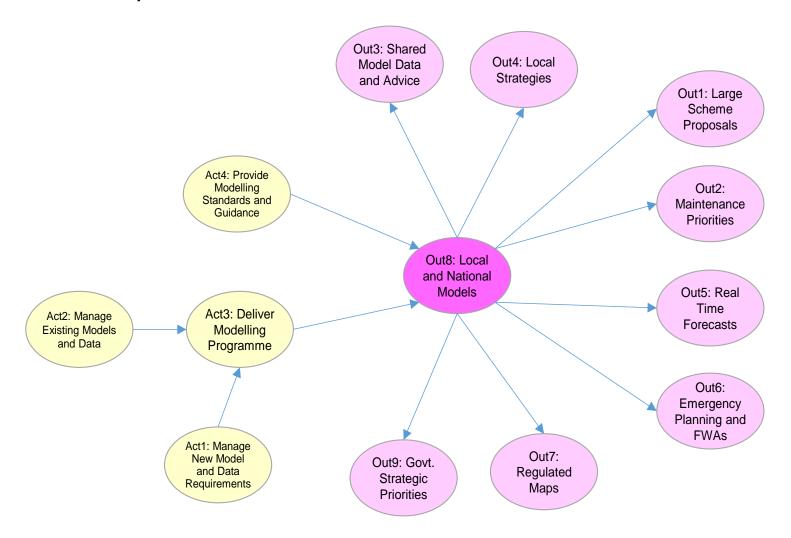
- Green bubbles removed (but be aware when estimating probabilities)
- Activities combined where linear chains only
- Primary outputs listed, but uses of these outputs removed



## Simplified modelling, mapping and data model Post-Workshop 3

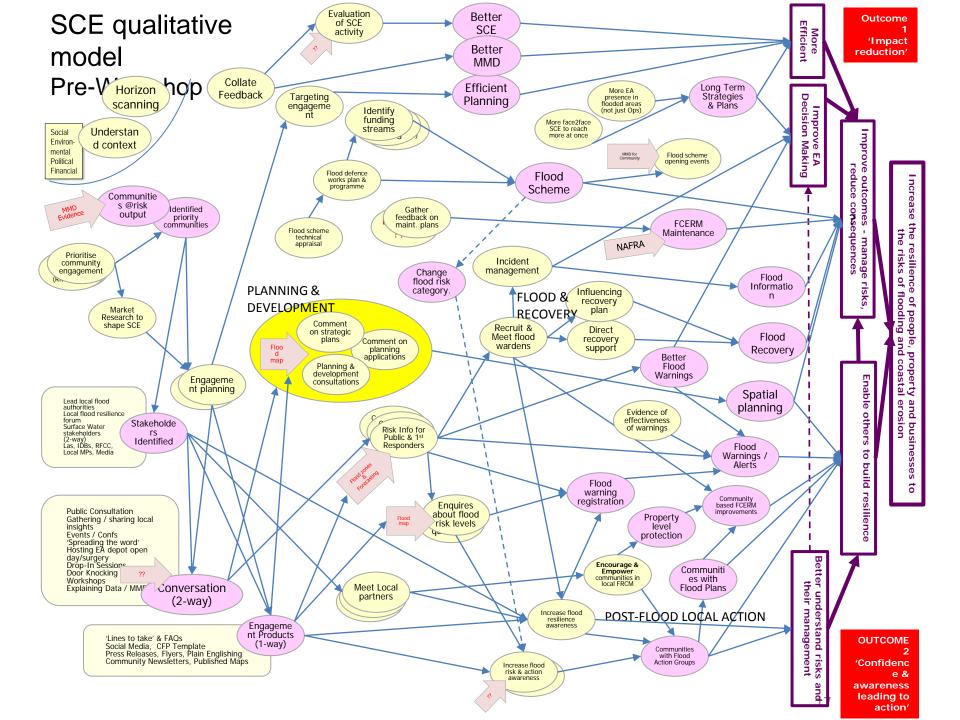


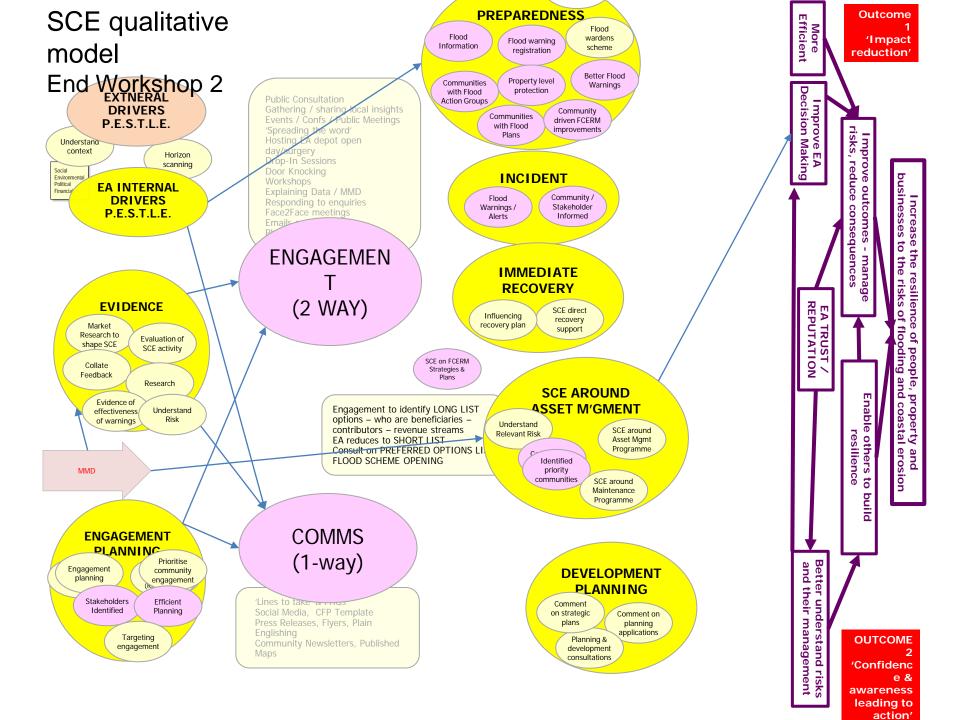
## Final modelling, mapping and data model for quantification



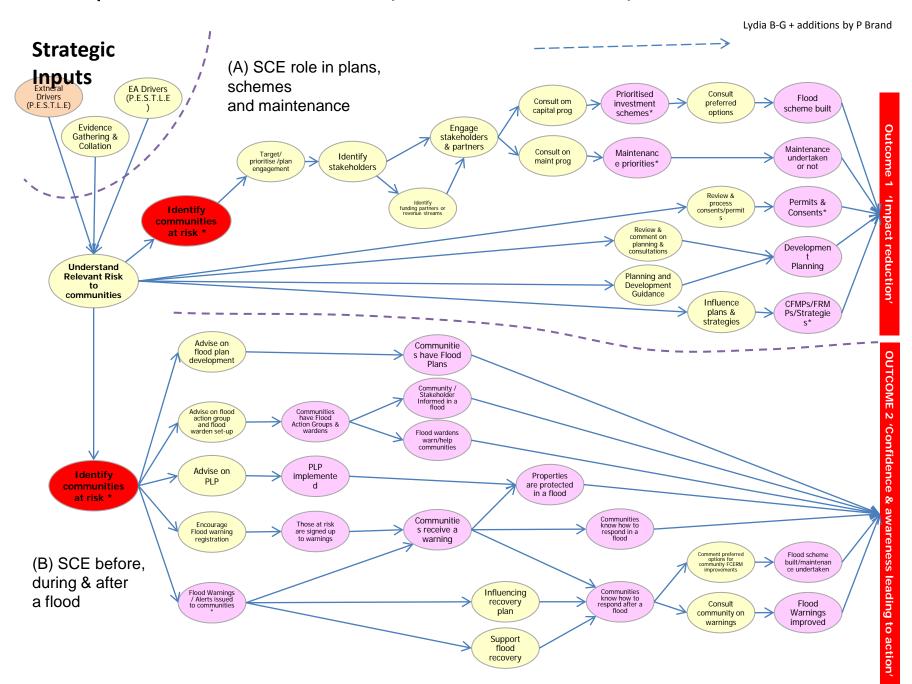
# A1.2 – Model evolution – stakeholder and community engagement

A1.2.1 Qualitative model

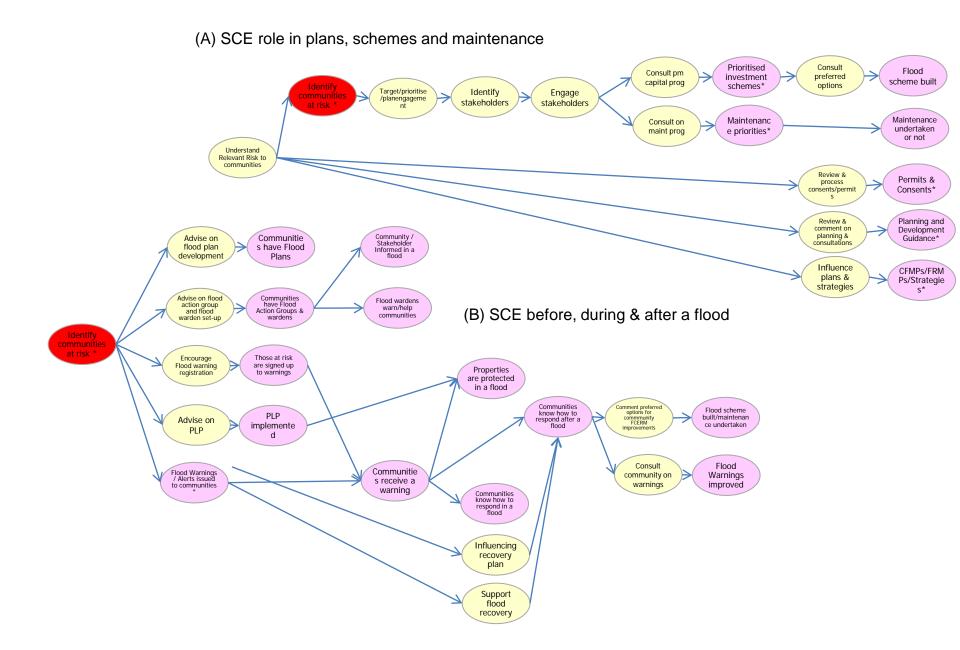


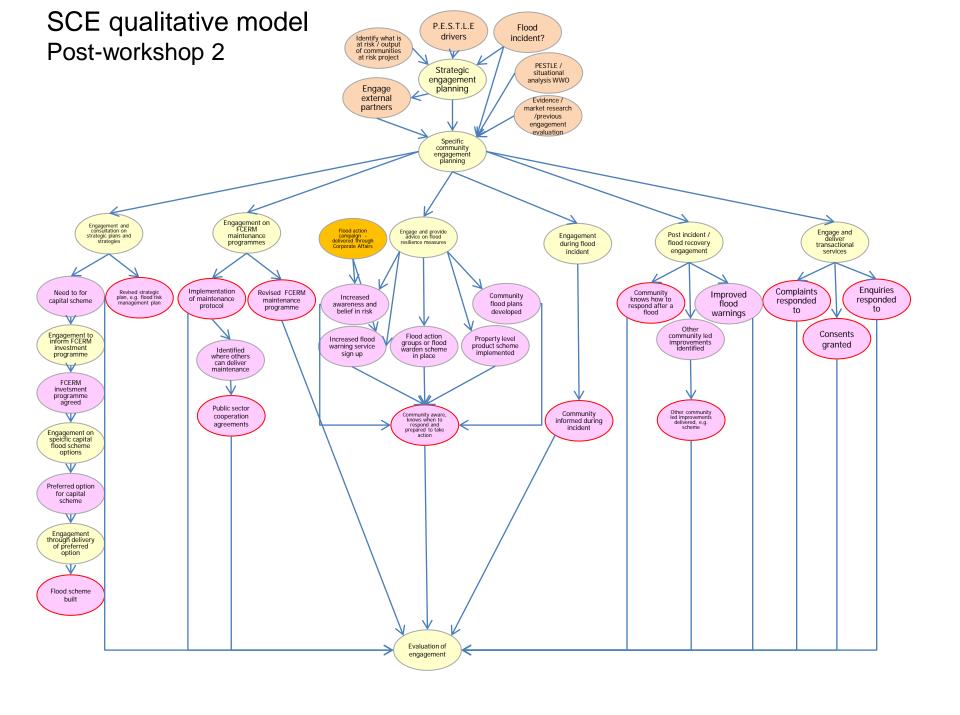


## SCE qualitative model - Developments Post-Workshop 2 - using MMD model style



## SCE qualitative model – Further developments Post-Workshop 2

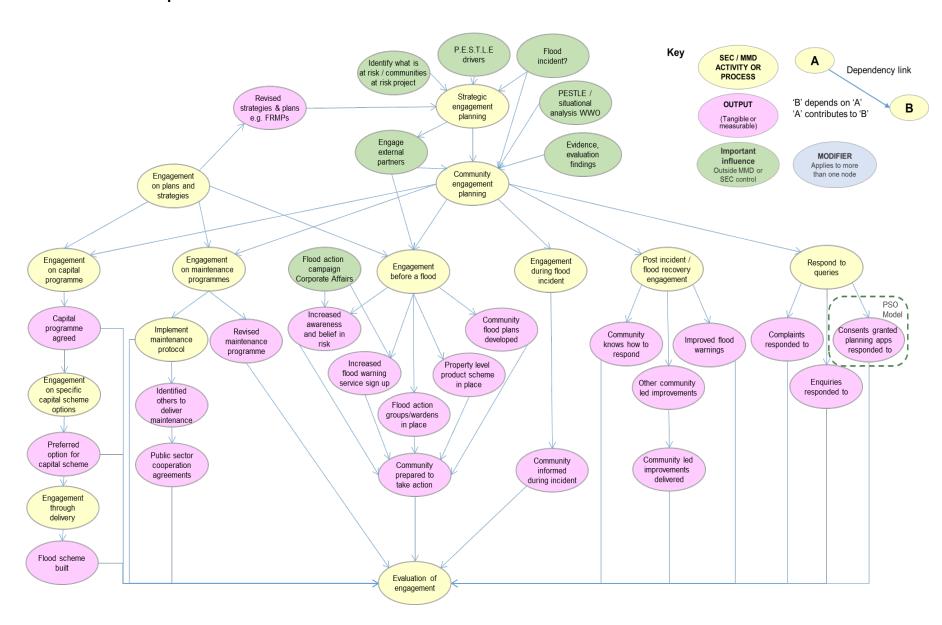




# A1.2 – Model evolution – stakeholder and community engagement

A1.2.2 Final qualitative model

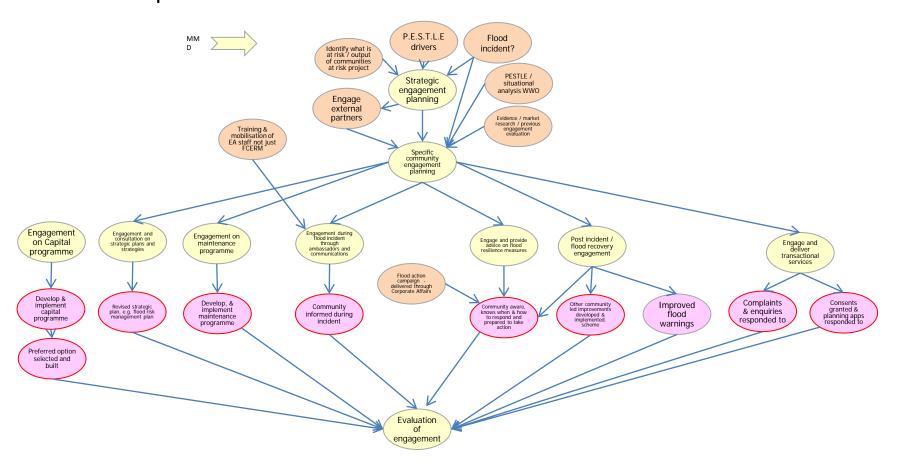
### Final SCE qualitative model



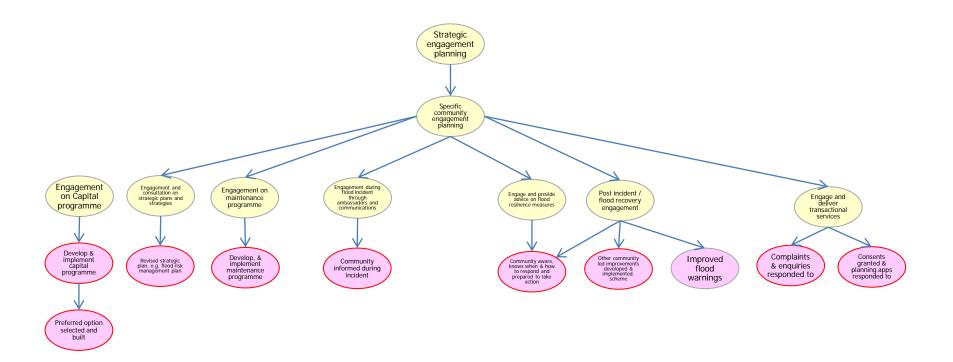
# A1.2 – Model evolution – stakeholder and community engagement

A1.2.3 Simplified model for quantification

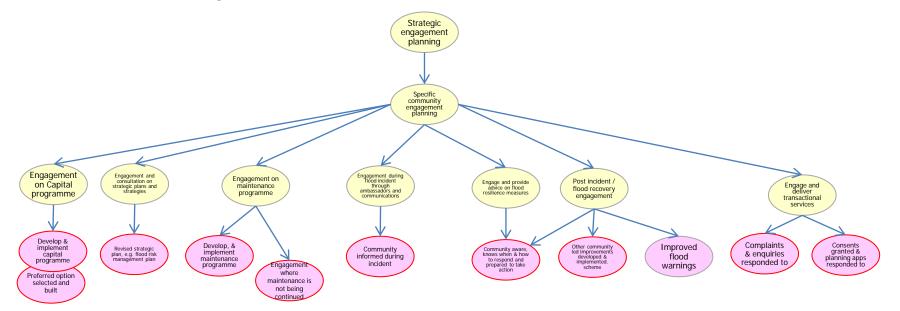
## Simplified stakeholder & community engagement model Pre-Workshop 3



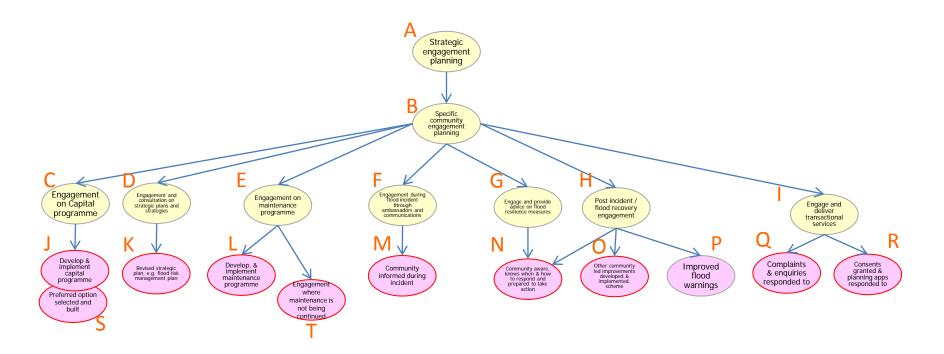
## Simplified stakeholder & community engagement model Pre-Workshop 3 – further development

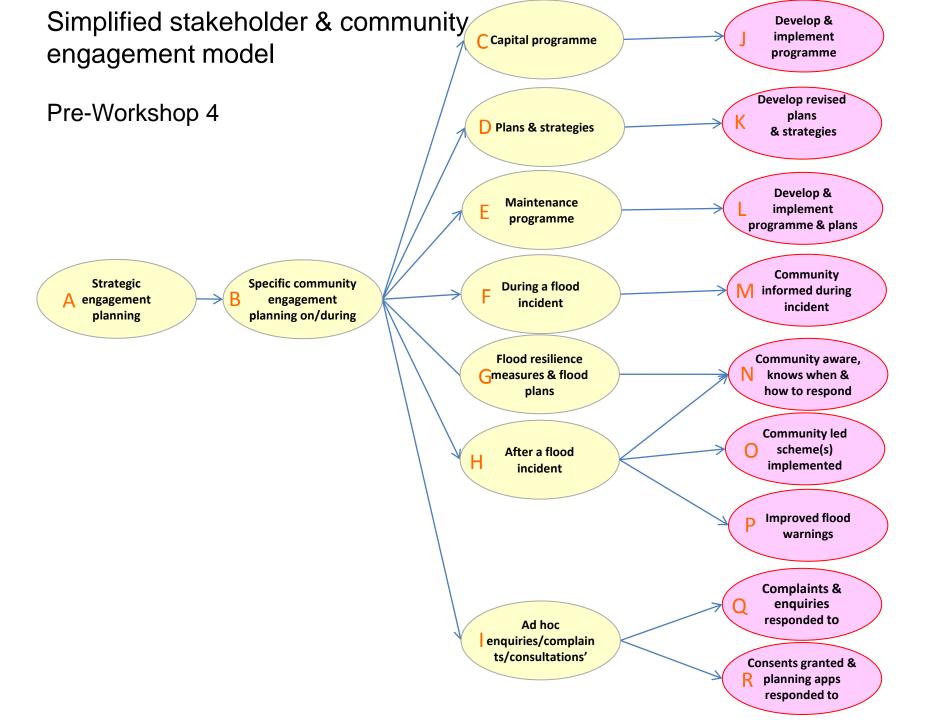


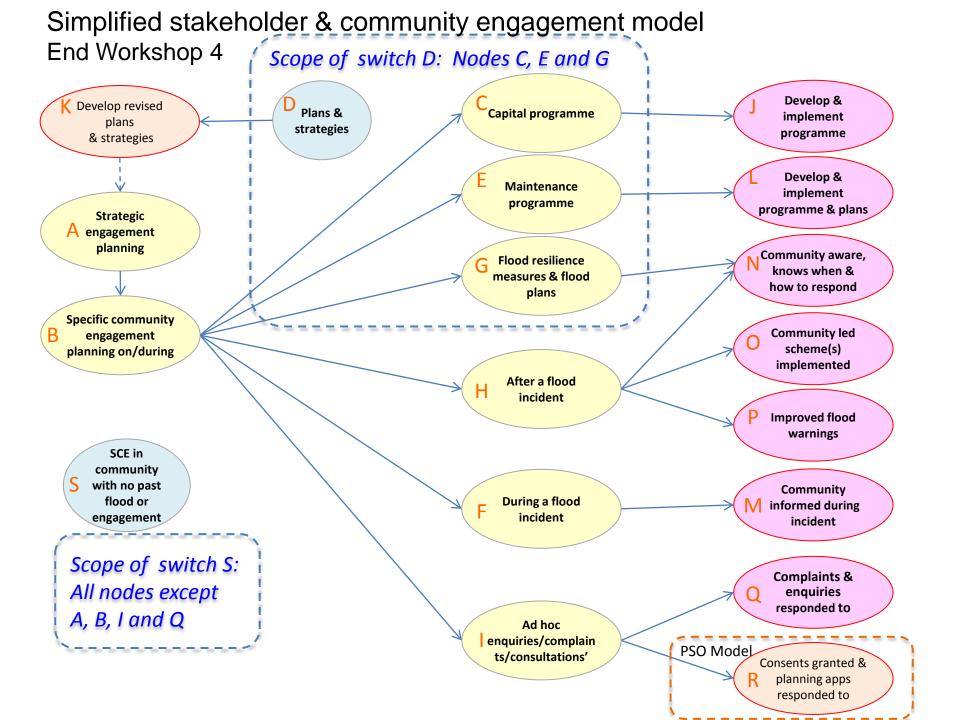
## Simplified stakeholder & community engagement model As amended during Workshop 3



## Simplified stakeholder & community engagement model As amended during Workshop 3







#### Final stakeholder & community engagement model for quantification Scope of switch D: Nodes C, E and G Develop & Develop revised **Engagement on** Plans & implement capital plans Capital programme strategies programme & strategies Develop & **Engagement on** implement Maintenance maintenance Strategic programme programme & plans engagement **Engagement before** planning a flood -Community aware, preparedness knows when/how (warning service, community flood to respond, Specific community implements local engagement schemes planning for a given community **Engagement After a** Improved flood flood incident warnings SCE in community Community **Engagement During** with no past informed during a flood incident flood or incident engagement **Complaints &** Scope of switch S: enquiries Ad hoc All nodes except responded to enquiries/complain ts/consultations on A, B, I and Q PSO Model

planning

applications

Consents granted &

planning apps responded to