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## Enabling community maintenance for local flood risk management

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### Summary

*Community resilience to flood risks is essential, support is required for communities to become climate champions and get actively involved in the management of their flood risk. This project will explore approaches to enable and empower local community groups to undertake appropriate and routine maintenance of local flood risk management infrastructure (surface water and ordinary watercourses). This will improve resilience and relationships between Risk Management Authorities and communities, recognising they can have a key role in flood risk management and the delivery of better places and spaces.*

### Background and justification

The Flood and Coastal Erosion Risk Management (FCERM) strategies for England and Wales are focused on improving the resilience of communities and places to flooding. They encourage communities to be climate champions and become active in the management of their flood risk.

Defra's 25 Year Environment Plan (25 YEP) also sets an aspiration of bringing the public and private sectors together to work with communities and individuals to reduce flood risk and deliver multiple benefits e.g. biodiversity, amenity, social cohesion, health and wellbeing and economic improvements. The 25 YEP and FCERM strategies also emphasise the role of nature-based solutions (Sustainable Drainage Systems (SuDS), Natural Flood Management (NFM)) and the recovery of nature (nature recovery networks) which communities are well placed to be involved in their delivery and management.

Some community groups are willing and able to manage their own flood risk being capable and best-placed to maintain their own flood risk management assets, or are able to 'top-up' maintenance by RMAs if they are willing and actively enabled to do so. Environmental NGOs (e.g. River Trusts, Wildlife Trusts, RSPB, WWT) and organisations like The Conservation Volunteers (was BTCV) regularly run sessions where volunteers and communities undertake simple landscaping activities in their communities.

The FCERM strategies identify the potential for communities, and voluntary groups to undertake appropriate operational and maintenance activities, normally the sole responsibility of Risk Management Authorities (RMAs) through in-kind (i.e. time) contribution. Some community groups already undertake maintenance, but there are many more that are willing, or can be encouraged to participate. Developing a shared understanding of the challenges and opportunities together with support and tools will help RMAs understand how to more effectively work with communities, to empower them and provide support by having clearer protocols, guidance and training to facilitate community-led maintenance.

RMAs are required to make efficiencies, focus on highest flood risk and complex FRM infrastructure. Government is also committed to work collaboratively with RMAs and local communities. This project to enable community maintenance can improve resilience and respond to the recommendations with the Surface Water Management Action Plan (2018) and the Surface water and drainage: review of responsibilities undertaken by David Jenkins (August, 2020) which the government has accepted. It is important to have the right people managing the right assets in the right way.

Local flood risk management approaches like SuDS and NFM where runoff is often managed on the surface and with more natural and vegetative approaches provides a significant opportunity for routine maintenance by communities.

Maintenance of simple local flood risk management infrastructure and SuDS using techniques such as vegetation management, grass cutting, debris clearance and conveyance management can be achieved. Research also suggests that community maintenance can be supported by:

- Understanding the flood risk management assets, maintenance requirements and the responsibilities of the RMA and the potential contribution community maintenance could make.
- Understanding what is appropriate maintenance for local flood risk management infrastructure.
- Encouraging local communities to influence their local environment through operation and maintenance of the flood risk management assets, managing risk and aligning management regimes with their passion for the local community and places.
- Understanding the assets and ways to formalise commitments for long-term, ongoing routine maintenance that could be managed by local councils and other democratic institutions (e.g. parish councils)
- Understanding potential risks and their mitigation for community-led maintenance, including the development of simple risk assessments and provision of insurance for community groups (e.g. Zurich scheme available through BTCV)
- Permitting requirements to support maintenance, e.g. simplified consenting procedures (in EA Thames region)

This project would facilitate RMAs to work with engaged communities to utilise their interest and willingness for enhanced participation in local flood risk management. The project will have two phases using case studies and experience to underpin a framework of principles and supporting guidance for RMAs and community groups. This would cover:

1. Identification of the behaviours, legislation, policy, processes and procedures that hinder or enable routine community operation and maintenance activities;
2. Identification and description of the range of activities that can be carried out safely and environmentally sensitively by community groups. This will include detailed guidance for common activities such as: risk assessment process for all activities; weed and debris clearance from streams; vegetation management including embankment and swale grass cutting; weed/invasive species management; litter picking and; inspecting and clearing inlets and outlets; and operating simple flood gates;
3. Identification of specific training and guidance needs both for the community groups and those working within RMAs;
4. Identification of a process for monitoring the maintenance activities carried out by communities. (Depending on the situation this may be linked to an assessment of asset performance, condition and associated training needs).

### **Project benefits and outcomes**

Community groups and RMAs are likely to be the primary beneficiaries and users of the guidance. Many of the benefits would be shared by them, however specific benefits are:

#### **Benefits for community groups**

- **Actively managing their flood risks** – community groups would be empowered and enabled to manage flood risks and to improve their local environment.
- **Easy to use guidance on maintenance** - approaches to maintaining local flood risk management infrastructure will be developed enabling communities to take an active role in maintenance.
- **Improving a shared understanding** - guidance written for community groups and RMAs on approaches to manage flood risks will provide opportunities to share an understanding of flood risk management and approaches to enhance the local environment.
- **Developing successful and longer-term relationships with RMAs** – expectation of RMAs and communities will be better appreciated by each other. The concerns and potential contribution of community groups will also be better understood.

- **Overcoming challenges**– the guidance will help community groups and RMAs work more effectively together and deliver local improvements.

### Benefits for RMAs

- **Local flood risk management** – the contribution of flood risk management assets to reducing risks will be understood and enable maintenance to be appropriate by the right people with the right support.
- **Shared understanding of RMA responsibilities** – RMAs, community groups and landowners would have a better understanding of the role that RMAs have with regards to managing watercourses.
- **Enabling community maintenance** – ‘success factors’ for establishing good procedures and working practices to enable community-led maintenance will be shared.
- **Delivery of multiple benefits** – the involvement of communities to manage flood risk assets may help deliver multiple benefits through improving the quality of places and spaces, amenity and improving local social cohesion.
- **Savings in operational and maintenance budgets** – community maintenance will enable RMAs to more cost-effectively manage their flood risk management infrastructure that may otherwise be uneconomic to maintain.

### Objectives

The overall objective of the project is to provide a framework of principles and guidance to enable community groups (possibly facilitated by Third Sector organisations) to deliver routine maintenance and asset management activities. The specific objectives include.

1. Engage with relevant stakeholders to understand the challenges and opportunities of enabling community maintenance of local flood risk management infrastructure, e.g. clarity around ownership and responsibility for assets.
2. Identify where community maintenance is not possible and make appropriate recommendations for changes in policy and approach.
3. Undertake a review of case studies, practices and experience related to community maintenance of flood risk management assets to determine challenges, opportunities and good practice.
4. To develop and engage on a principles document for RMAs and community groups providing high-level guidance to support community maintenance and asset management activities
5. To develop separate guidance for policy makers, RMA practitioners and local community groups that help interpret and implement these principles. The guidance documents will:
  - a. set the policy level context for the work
  - b. define procedures for determining the right level and frequency of maintenance (defined frequency vs ad-hoc)
  - c. capture and appropriately present the good practice and lessons learnt where community groups have delivered routine maintenance and asset management tasks and/or paid others to carry out maintenance (e.g. for trash screen clearance); and
  - d. identify the processes and procedures that would be necessary to set up and deliver such arrangements routinely,
  - e. identify the specific training and guidance needs both for the community groups and for FCRM staff, including provision of 1-2 page guides to at least the following: risk assessment process for all activities; weed and debris clearance from streams; embankment or SuDS vegetation management, checking of SuDS inlets and outlets and weed/invasive species management;
  - f. identifies a process, tools and guidance for community-led visual condition assessment
6. Disseminate the guidance to a wide audience.

## Outputs

Depending on the budget available, four outputs are envisaged. A principles document, policy briefing document, and two guidance documents. The principles document and draft policy brief will be delivered in the first phase, this will be based on engagement with RMAs and community groups and revised by the PSG. The outputs are:

1. Principles document – this will present case studies and capture the good practice from the case studies as principles for RMAs and community groups. (First phase of the project)
2. Short policy briefing document for policy makers setting out the reasons for progressing community maintenance
3. Guidance for RMAs focused on approaches to facilitating and enabling community groups to undertake maintenance within the policy context and inclusion of good practice.
4. Guidance for community groups outlining approaches, and maintenance activities for specific flood risk management assets.

The guidance documents will provide an overview of the policy context setting out how it can influence the approach to enabling and empowering community groups to maintain flood management assets. It will also summarise the key success factors, lessons learnt from case studies. The processes and procedures that would be required to enable and empower communities to undertake maintenance will also be included.

The anticipated target audiences include:

- Environment Agency, Natural Resources Wales and SEPA
- Risk management authorities
  - Lead Local Flood Authorities
  - Water and Sewerage Companies
  - Highways England
  - Internal Drainage Boards
- Private, riparian landowners
- Community flood resilience groups
- Rivers Trusts, Wildlife Trusts
- Other relevant Third Sector Groups

## Approach and methodology

The project will be managed by CIRIA, guided by an independently chaired Project Steering Group (PSG) that represents the target audience, key stakeholders groups and funders. The project will be undertaken collaboratively to develop consensus. It is envisaged that the project will include:

### Phase 1

1. **Development and fundraising** – CIRIA working with interested parties will develop and fundraise the proposal (including the development of the PSG).
2. **Research contractor appointment** – this will be based on ensuring the research contractor has the right skills and approach to delivering collaboratively and consensus-based outputs.
3. **Engagement and collaboration** – this is likely to be undertaken by a survey and engagement with RMAs and appropriate Third Sector organisations. It will identify examples and case studies where community maintenance has been undertaken and capture the challenges faced. It will also be used to help identify how challenges have been overcome and key success factors. The National Flood Forum will be funded to support this activity and this will include involvement of RMAs, River Trusts, Wildlife Trusts and other NGOs or community groups undertaking maintenance. This approach will identify and present case studies, outline the maintenance activities undertaken, the policy framework and other factors contributing to success or challenges faced. Examples in Hillingdon of the identification of assets and culverted lost watercourses include: Cannon Brook; Chesham FAS; Contributions policy for Thames Tidal defences; Hanneys Flood group.

4. **Literature review** – capitalising on existing reviews the policy framework for enabling community groups to undertake maintenance will be reviewed to identify challenges and opportunities. A draft policy brief will be developed for Phase 1 and augmented in Phase 2 as the regulatory landscape may change during the remainder of the project.
5. **Development of principles** – Following engagement with community groups, the collation and assessment of case studies. General principles for approaches to enable community groups to maintain local flood risk management assets will be developed and freely distributed, as will principles to undertake specific activities.
6. **Engagement on principles** – the principles will be reviewed and discussed with those engaged in stage 3 and include Third Tier local authorities (i.e. Parish Councils) and community groups considering taking on the maintenance of SuDS (particularly those working in the Hillingdon and Thames RFCC region).

## Phase 2

7. **Production of guidance and policy briefing note** – following feedback on the principles document, the policy briefing note and two guidance documents will be developed with input from the PSG, who will review and comment on two drafts.
8. **Dissemination** – Once the guidance has been reviewed by the PSG and an external reviewer, it will be edited, desktop-published and produced for free download. Dissemination activities will include webinars.

Progress against an agreed programme will be driven by milestones based on project deliverables and co-ordinated with four project steering group meetings. Project Steering Group meetings will advise CIRIA and the research contractor on the technical quality of outputs.

## Project information

Once funded, the project will take between 12 - 18 months to complete. There will be two phases, with the first phase delivering the principles document and draft policy brief.

The first phase of the project is estimated to cost £50k and will include:

- Contractor selection
- Project steering group meetings (x2)
- Obtaining/collating and presenting of case studies
- Initial review of policy and regulations (and development of draft briefing document)
- Presentation of case studies and draft principles document
- Engagement on draft principles through a workshop
- Revision of principles document
- Editing and dissemination of final principles document

The second phase of the project is estimated to cost £107k.

This project was developed with the support of Hillingdon Council, the Environment Agency, Middlesex University and HR Wallingford.

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