# Surface Water Management Planning

## A quick start guide

This guide provides a summary of the surface water management planning process and should be read alongside the Scottish Government guidance[1].

### WHAT IS A SURFACE WATER MANAGEMENT PLAN?

Surface water management plans (SWMPs) identify and implement the most sustainable actions to reduce the risk of surface water flooding as required by the Flood Risk Management (Scotland) Act 2009.

### LONG TERM AND RISK BASED

The plans should be:

- long term and reviewed and updated following the Flood Risk Management Planning cycles to reflect improving knowledge and understanding
- risk based, targeting effort and investment in those areas with the greatest risk of flooding and where the most benefits can be achieved

All stages of the surface water management planning process should be risk based. The amount of detail at each stage should take into account:

- level of flood risk;
- complexity of the flooding problem;
- resources available; and
- availability of, and confidence in, existing data.

Stages of the surface water management planning process can be seen in Figure 1 and Table 1.

An example SWMP can be seen in Figure 2 and principles of sustainable surface water management can be seen in Figure 3.

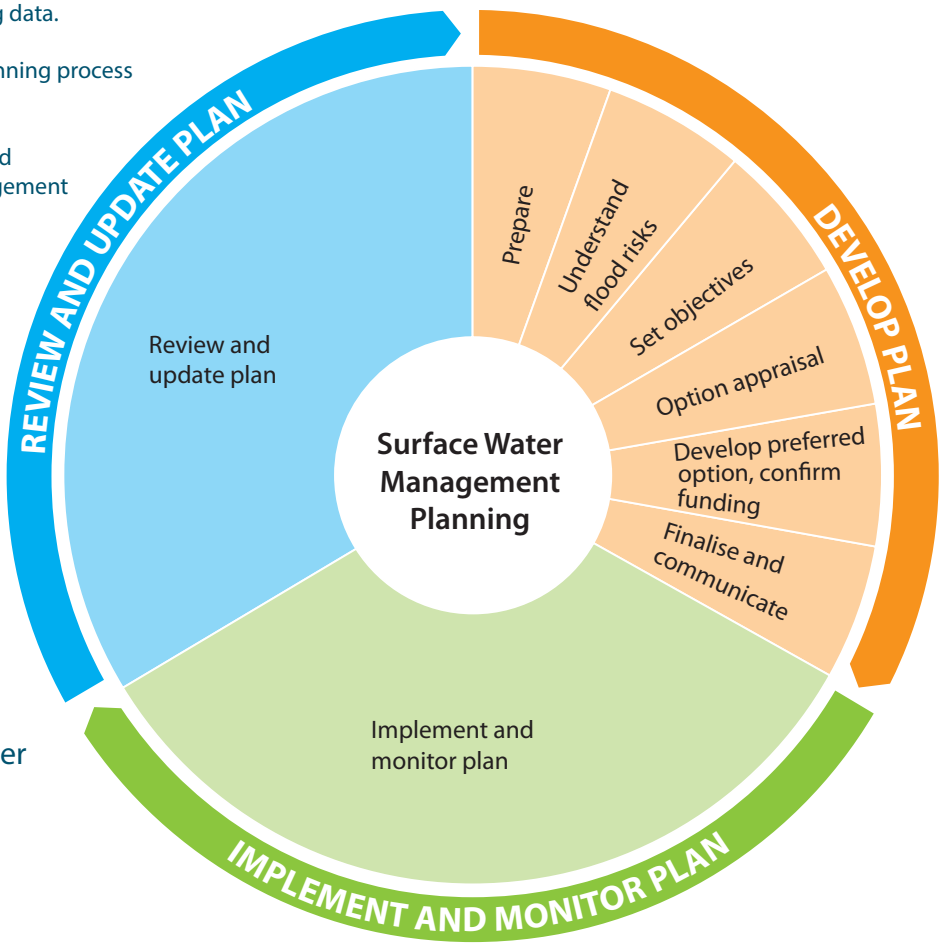


Figure 1. Stages of the surface water management planning process

The Scottish Government
Riaghaltas na h-Alba

SEPA
Scottish Environment Protection Agency

Scottish Water
Trusted to serve Scotland

[1] Scottish Government Surface Water Management Planning Guidance www.gov.scot/Topics/Environment/Water/Flooding/FRMAct/guidance

## Table 1. Summary of surface water management planning stages

| SWMP STAGE | SUMMARY OF STAGE | EXAMPLE OUTPUTS |
|---|---|---|
| Prepare | • Resources.<br>• Governance.<br>• Consultation and co-ordination.<br>• Collating existing information on surface water flooding.<br>• Validate existing information.<br>• Scoping level of detail and defining geographical scale of the SWMP(s). | • Initial findings of key stakeholder consultation.<br>• Data relating to flood hazard and risk.<br>• Data register.<br>• Section of SWMP report clearly communicating findings of this stage.<br>• Other outputs e.g. GIS data and maps showing key information (e.g. SWMP areas). |
| Understand flood risk | • Analysing and interpreting information to understand surface water flood hazard and risk.<br>• Identify areas with greatest risk.<br>• Consultation and co-ordination. | • Section of SWMP report clearly communicating the sources, pathways and adverse impacts (risk) of surface water flooding.<br>• Identification of areas with greatest risk.<br>• Other outputs e.g. GIS data and maps showing key information (e.g. flood hazard and risk, areas with greatest risk), communication material for different audiences. |
| Set objectives | • Confirming objectives from Flood Risk Management Strategies.<br>• Setting more detailed objectives for areas with greatest risk.<br>• Prioritising objectives if required.<br>• Key consultation and co-ordination stage to identify other projects that could be carried out jointly to aid delivery and realise multiple benefits. | • Consultation findings.<br>• Section of SWMP report clearly communicating objectives, indicators and priority of objectives.<br>• Other outputs e.g. GIS data and maps showing key information (e.g.areas of greatest risk, objectives for the areas and their priority), communication material for different audiences. |
| Option appraisal | • Scoping the option appraisal, confirming objectives (e.g. high level appraisal for all objectives or more detailed appraisal and design for priority objectives).<br>• Developing and comparing options for each objective in order to choose preferred option.<br>• Consultation and co-ordination.<br>• Understanding the degree of confidence in the appraisal. | • Section of SWMP report clearly communication the outcomes of this stage including reasons for selecting preferred option.<br>• Co-ordination and joint working where required to develop options that will yield multiple benefits.<br>• Other outputs, e.g. supporting information for the option appraisal, clear communication of information to aid decision making, consultation material for different audiences. |
| Develop preferred option, confirm funding | • Developing preferred option in more detail.<br>• Confirm responsibilities and funding. | • Section of SWMP report clearly communicating the outcomes of this stage including confirmed action plan and SMART objectives. |
| Finalise and communicate plan | • Producing aSWMP report that summarises the key findings and outputs and includes proposals for monitoring, implementing, reviewing and updating the plan.<br>• Considering communication material for other stakeholders and the public. | • Detailed SWMP report that provides sufficient information for those implementing the plan.<br>• Summary report and maps including action plan to communicate clearly with other stakeholders e.g. the public.<br>• Data pack to help share key information, e.g. key GIS outputs, maps, action plan. |
| Implement and monitor actions | • Implementing actions.<br>• Monitoring success of the actions to determine progress towards achieving objectives.<br>• Gathering information on complete actions. | • Updated summaries of all actions and their status (e.g. a 'live implementation plan') to aid co-ordination and communication, including confirming when an action is complete and objectives achieved.<br>• Key information about complete actions recorded and shared with stakeholders. |
| Review and update SWMP | • The SWMP is a long term process that should follow the flood risk management planning cycles.<br>• When reviewing and updating SWMPs the development stages should be repeated and any required changes made, provide information on complete and planned actions. | • Updated or new outputs e.g. SWMP report, summary SWMP for clear communication to different stakeholders, technical reports, updated 'data pack' to help share key information with others and aid co-ordination, e.g. key GIS outputs, maps, actions plan (showing information on complete and planned actions). |

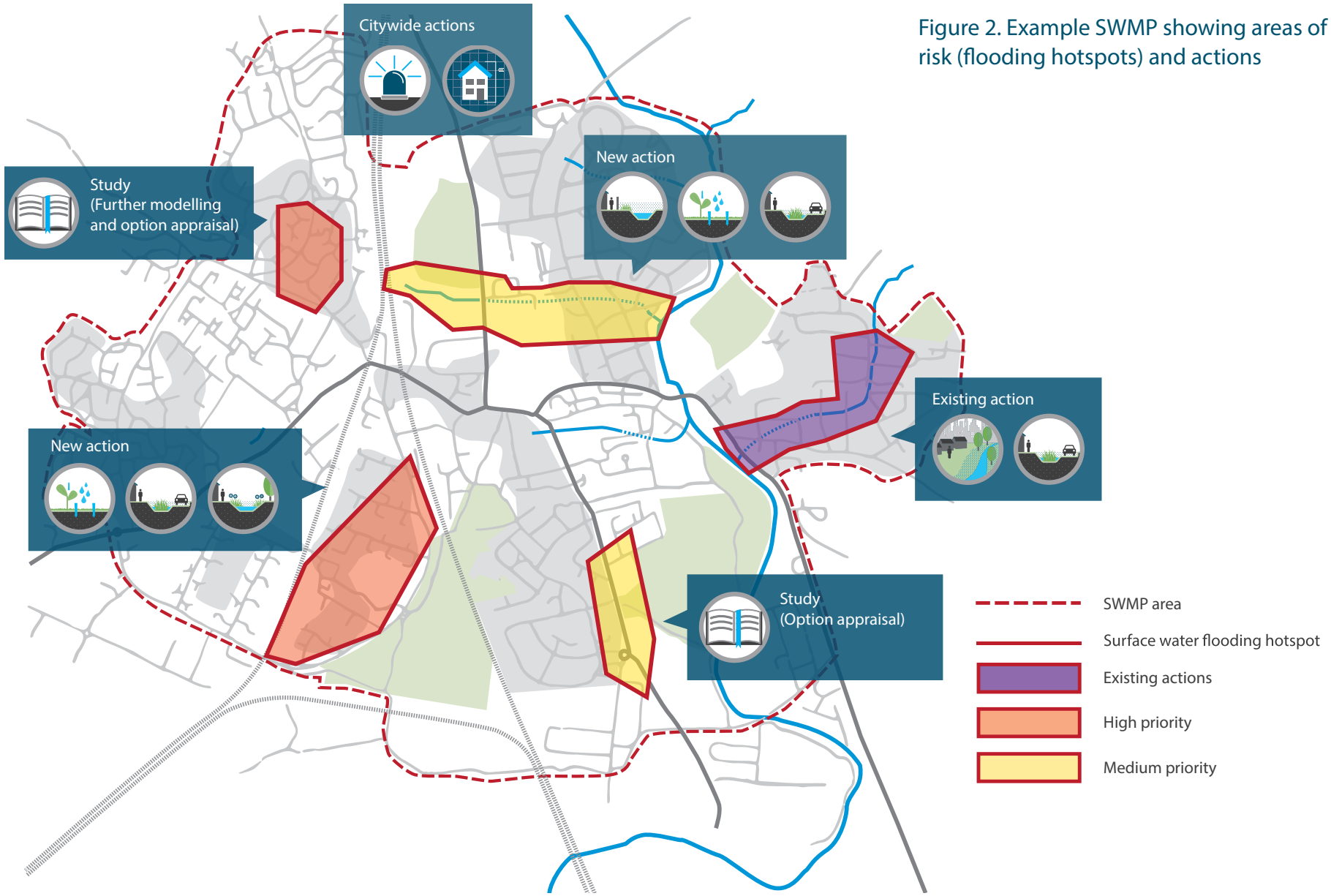


Figure 2. Example SWMP showing areas of greatest risk (flooding hotspots) and actions

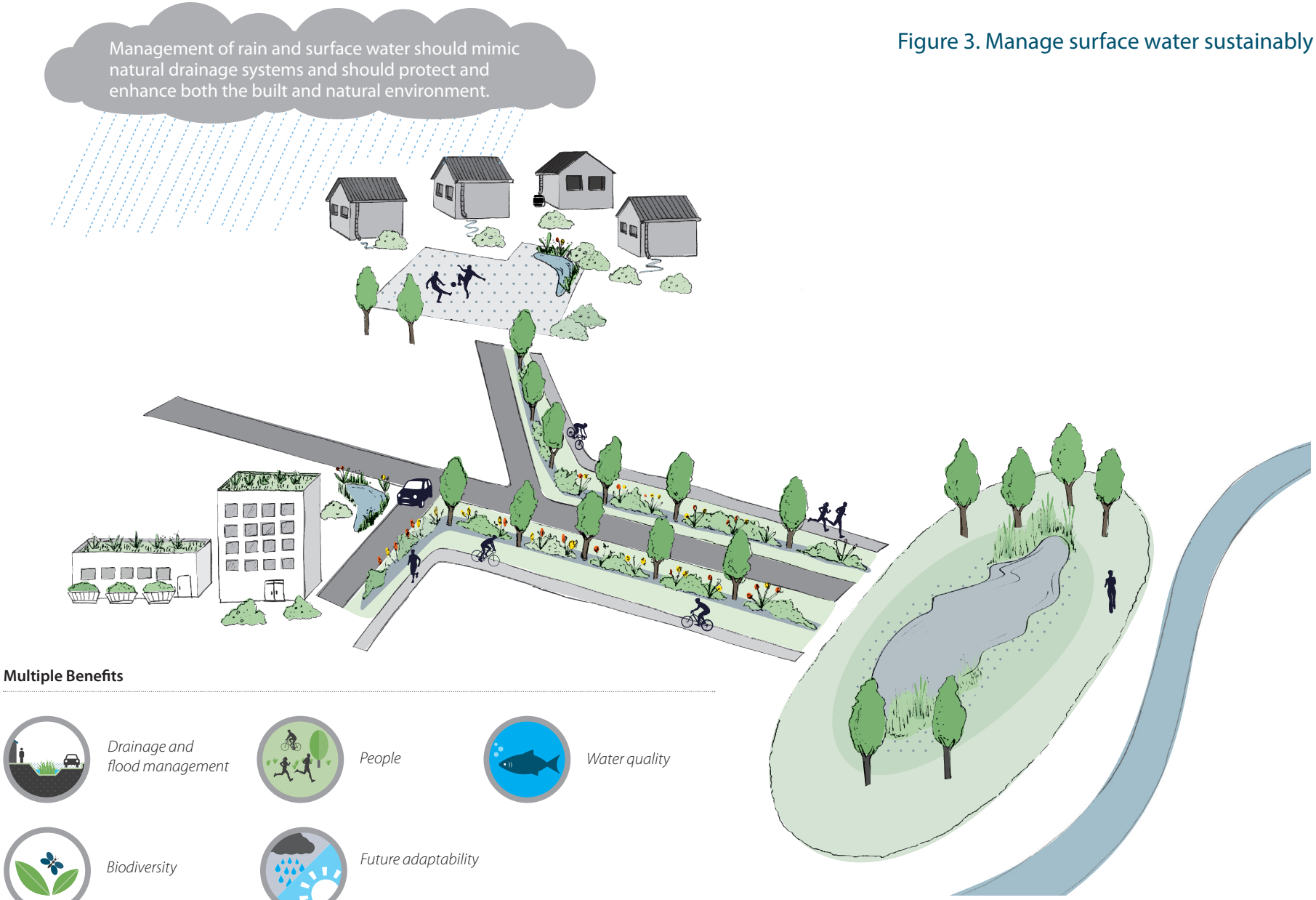


Figure 3. Manage surface water sustainably